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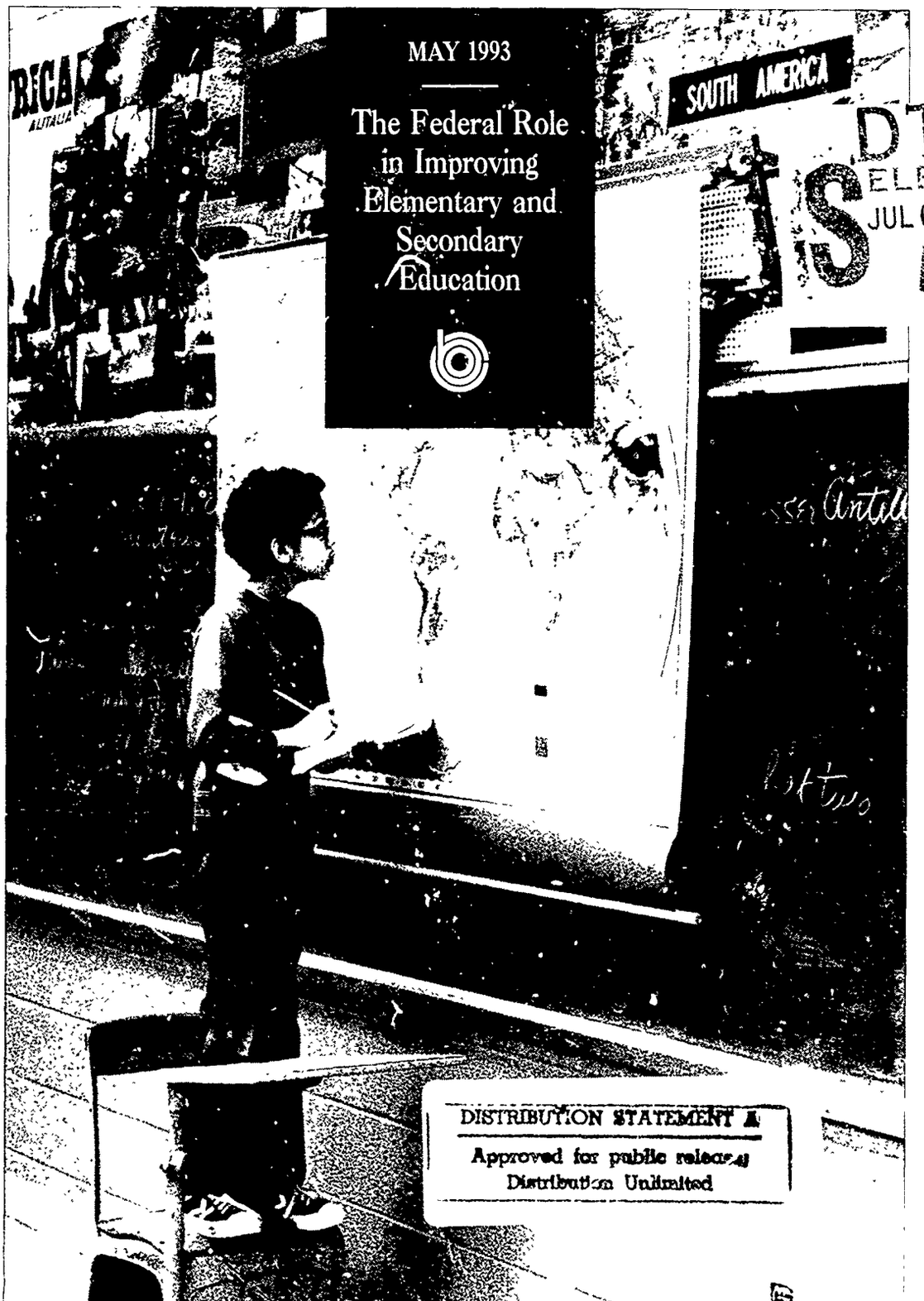

MAY 1993

The Federal Role in Improving Elementary and Secondary Education

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THE FEDERAL ROLE IN IMPROVING ELEMENTARY AND SECONDARY EDUCATION

The Congress of the United States
Congressional Budget Office

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Preface

The 103rd Congress will decide whether to reauthorize most of the major federal programs for elementary and secondary education. Because of the nationwide movement for education reform begun in the early 1980s, the Congress may wish to consider making major changes in the role of the federal government in education. As requested by the Ranking Minority Member of the Senate Budget Committee, this study describes the efforts by states to improve their schools, examines trends and current conditions in education, and analyzes various options for changing the federal role. In accordance with the Congressional Budget Office's (CBO's) mandate to provide objective, impartial analysis, this study contains no recommendations.

Jay Noell of CBO's Human Resources and Community Development Division prepared the study under the direction of Nancy Gordon and Bruce Vavrichek. Valuable comments were provided by Paul Cullinan, Richard Elmore, Eric Hanushek, Deborah Kalcevic, and Constance Rhind. Special thanks for research support are due to Julia Jacobsen.

Leah Mazade edited the report, and Christian Spoor provided editorial assistance. Ronald Moore furnished administrative assistance and helped type the manuscript. Martina Wojak-Piotrow prepared the report for publication.

Robert D. Reischauer
Director

May 1993

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Summary

The 103rd Congress will consider reauthorizing most of the major federal programs that support elementary and secondary education in the United States. These programs, with funding of about $9.5 billion in 1993, finance a variety of activities including educational services for disadvantaged students, school improvement, magnet (or special program) schools in desegregating school districts, assistance to schools in federally affected areas (also known as Impact Aid), bilingual education, Indian education, mathematics and science education, and drug-free schools and communities.

Most of these programs were last reauthorized in 1988, and since that time, the nationwide movement begun in the early 1980s to improve schools and reform education has continued. In response to those efforts, an Education Summit was held in Charlottesville, Virginia, in September 1989, at which then President George Bush and the nation's governors developed six national goals for education to be met by the year 2000. The governors also pledged at the summit to persist in their efforts to improve education in their states.

The summit and the continuing reform movement at the state and local level raise the question of how federal programs and the federal government should relate to those developments. In considering possible changes in federal education policies as part of the process of reauthorization, the Congress confronts a range of issues. To assist it in its deliberations, this study examines the current role of the federal government in elementary and secondary education and recent trends in the condition of the U.S. education system. It also presents some policy choices that the Congress may wish to consider.

The Federal Role

Historically, the federal government has played a secondary role in education compared with state and local governments, which traditionally have been responsible for providing schooling. (The federal share of spending for elementary and secondary education today amounts to only about 6 percent; it has never been more than 10 percent.) But federal involvement in education increased significantly after 1965, when the Congress enacted the Elementary and Secondary Education Act (ESEA) as part of President Lyndon B. Johnson's war on poverty. ESEA, through Title I (which is now known as Chapter 1), initiated federal assistance to school districts for the education of disadvantaged students. Since then, to promote equal educational opportunity, the federal government has provided aid to other groups of students--including disabled students, students with limited proficiency in English, and Indians (Native Americans). In 1993, about 70 percent of federal aid went to programs whose purpose was primarily equal educational opportunity. The remaining funds went to stimulate education reform (in part through research and development), pro-

vide limited general support for schools, and prepare students for employment.

During the early 1980s, the federal government became active in championing education reform because of widespread concern about the quality of U.S. education. Largely by using the so-called bully pulpit, the President and the Secretary of Education became leading proponents of excellence in education. Over the course of the decade, their support contributed to three waves of reform that swept the nation.

The first wave of education reform dates from 1983 when the National Commission on Excellence in Education released its report, *A Nation at Risk*. The central message of this report, which was repeated in a number of other major studies released about the same time, was that the nation's schools could and must be improved. In summoning the country to pursue school reform to stem what it called a "rising tide of mediocrity" eroding the nation's ability to compete effectively in global economic markets, the report recommended increased expectations of what students should know and be able to do.

The states responded rapidly to many of the criticisms contained in *A Nation at Risk* and other reports. By 1985, more than 40 states had raised high school graduation standards, almost 40 had come out with new or revised programs of student testing and evaluation, and 27 had increased instructional time. In addition, states also increased their spending for education.

Another set of reports issued in 1986 began the second wave of reform, which focused primarily on making schools more effective in teaching children and on enhancing the professional status of teachers. The reports highlighted state initiatives to reform education, documented the desire of the governors to lead the education reform movement, and, again, were followed by state action to improve education. By 1988, 29 states had instituted entrance exams for programs of teacher education, 37 states were requiring prospective teachers to pass tests for initial certification, 21 states had established alternative programs for teacher certification to attract teachers from a wider range of backgrounds, and 32 states had created programs to help first-year teachers adjust to the rigors of the classroom.

The third wave of reform began in September 1989 when the Education Summit initiated the development of six national goals for education to be met by the year 2000:

- All children in America will start school ready to learn.
- The high school graduation rate will increase to at least 90 percent.
- U.S. students will demonstrate competency in at least English, mathematics, science, history, and geography.
- U.S. students will be first in the world in science and mathematics achievement.
- Every adult will be literate and able to compete in a global economy.
- Every school will be free of drugs and violence.

A National Education Goals Panel consisting of governors, Members of Congress, and representatives of the Administration was also created to report annually on progress toward the goals. After deliberating about how to measure the progress of students in mastering academic content, the panel recommended that developing national standards be considered to define what students should know. It also urged consideration of new methods of assessing the success of students in meeting the national goals.

In response to the panel's efforts, the Congress in 1991 authorized a National Council on Education Standards and Testing (NCEST) to consider the desirability and feasibility of

national academic standards and of a voluntary system of assessments to measure the performance of students. The council included representatives of the Congress and the Administration, governors and state legislators, education officials, and representatives from the business community. NCEST's deliberations led it to endorse national standards and voluntary assessments as effective means to promote equitable opportunity for all students, enhance the nation's civic culture by ensuring that all students have the knowledge and skills for democratic participation, and strengthen U.S. economic competitiveness in the world marketplace. NCEST's conclusions, in the context of widespread state and local reforms, constitute part of the setting for considering changes in the federal role in education. Another major component of that setting is how well the education system is doing now.

The Condition of Education in the United States

The national movement for education reform has made the condition of U.S. education a major public issue and raised questions that continue to receive attention. Are students performing as well today as they did 20 years ago? Is the nation investing an appropriate level of resources in education? And because learning is affected by the families and communities of students, what trends in family and social environments are advancing or impeding students' performance in school?

Outcomes of Education

The outcomes of greatest interest for assessing how well schools are doing are usually the proportion of students who graduate from high school and the level of achievement students attain, as measured by standardized tests of academic knowledge. These outcomes received increased scrutiny during the 1980s because many people believed that the academic performance of U.S. students was declining.

In the 1980s, high school graduation rates increased, and dropout rates declined. Black and Hispanic students in particular had notable improvements in these rates, which resulted in smaller differences between the rates for white students and the rates for these minorities.

Trends in the average scores of students on national tests of achievement showed mostly stability. Test scores in science, mathematics, reading, and writing from the National Assessment of Educational Progress (NAEP) reveal few changes since 1969, when NAEP was started. (NAEP is a Congressionally mandated assessment program that surveys nationally representative samples of students.) Scores from NAEP for black and Hispanic students, however, have increased over the past 20 years, reducing the gap in achievement between white and minority students. Nevertheless, black and Hispanic students continue to perform at levels significantly below those of white students at all ages and in all areas of the curriculum that were tested.

Although test scores have not been declining, many people argue that U.S. students cannot handle challenging subject matter, which some contend is a requirement for competing effectively in a global economy. Support for this position is found in the results of a 1990 NAEP mathematics assessment in which test scores were measured against standards of proficiency that defined what students should know and be able to do in mathematics. According to this assessment, more than one-third of U.S. students in grades 4, 8, and 12 failed to meet the lowest (or basic) performance standard. Fewer than 20 percent performed at the "proficient" level or higher, and the proportion reaching the "advanced" level was less than 3 percent. These performance standards in themselves are controversial, however, with some critics charging that they have little empirical validity, that they may vary between assessments, and that they

demand levels of achievement that are high, even when compared with the performance of students in some Asian countries.

Recent international comparisons of test scores in mathematics and science also suggest that U.S. students may not be learning as much in these subjects as are students in many other countries. For example, data from the second International Assessment of Educational Progress, conducted in 1990-1991, indicate that 9- and 13-year-old students in the United States do less well in science and mathematics than similar students in many of the other countries that participated in the study. But critics of international comparisons of student performance contend that results from these assessments may largely reflect curricular--rather than achievement--differences among the nations and that many countries carefully select the students who are allowed to take the tests.

Resources of Schools

The adequacy and distribution of resources for education are also topics of concern to many people, with overall expenditures for education and the salaries of teachers receiving the most attention as indicators. Judging by those measures, the resources available to schools increased substantially during the 1980s. After adjusting for inflation, expenditures per pupil in the public schools rose 35 percent between school years 1981-1982 and 1990-1991, reaching, on average, $5,400. State and local support for education increased more than federal spending, which declined from almost 10 percent of school funding in school year 1979-1980 to about 6 percent in school year 1989-1990.

Yet despite the increases that occurred, significant differences remain in levels of spending among school districts and states. However, intrastate disparities in expenditures per pupil did decline between 1980 and 1987, and the difference between the highest- and lowest-spending states also dropped slightly in the 1980s.

After falling in the 1970s, the average salary of full-time teachers increased during the 1980s. By school year 1990-1991, after adjusting for inflation, the average salary was at its highest level ever, about $33,000. In addition, the average number of students per teacher declined in the 1980s. Thus, in 1990, there were about 17 pupils per teacher compared with about 19 pupils per teacher in 1980.

Changes in the Characteristics of Students and Their Families

Research has shown that the characteristics of students and their families are more important than school funding in determining how well students perform. These characteristics affect both learning and the kinds of educational programs that schools provide.

The 1980s saw the unfolding of a number of notable trends affecting the performance of students. Increases occurred in the proportions of students from groups that often have relatively low levels of academic performance, including minority students, low-income students, students with limited proficiency in English, students with a learning disability, and students living in a single-parent family. Favorable trends included increases in the number of children attending preschool and in the average level of education of the parents (especially among blacks), and decreases in the proportion of high school seniors who reported ever using an illegal drug.

Along with the nationwide movement to reform the schools, these recent trends set the stage for the Congress to consider changing the role of the federal government in elementary and secondary education. Before proceeding to adopt specific policy options, however, the Congress faces basic decisions about what kind of role the federal government should play in improving education.

Policy Choices for the Future

The 103rd Congress faces two basic issues concerning the future role of the federal government in improving elementary and secondary education. The first is the relative priority to be given to matters of equity associated with particular groups of students as opposed to broader concerns about the excellence of the education provided to all students. Since the mid-1960s, federal support has largely gone to ensure equal educational opportunity for students with special needs.

Advocates of each position--equity versus excellence--present strong arguments. Although federal funding has increased for programs to assist students with special needs, supporters of a continued emphasis on equity maintain that the Congress has not provided the level of support necessary to meet the needs of these students fully. Other people argue that the federal government should now reduce its focus on students with special needs because a large number of the states provide supplemental funding for many of the groups singled out by federal legislation. Many of these critics also urge the federal government to place more emphasis on excellence in schooling, asserting that the performance of U.S. students has not been improving fast enough to meet the challenges of global economic competition.

The second basic issue facing the Congress is how active a role the federal government should play in the governance of the education system. This question is a recurring one and must be answered regardless of whether the Congress chooses to emphasize matters of equity or excellence.

Those advocating greater control of education by the federal government argue that it has a comparative advantage in governance relative to the states by virtue of its central position in the federal system. With 50 state governments, each with its own interests and needs, only the federal government can coordinate action among the states by providing a common vision and common standards for the nation as a whole.

In contrast, those favoring less federal control contend that state leaders are in the best position to know the problems facing their residents. Stronger direction by the federal government, they say, would only divert these leaders and confuse or impede what they are trying to do. In addition, some observers note that state governments have changed greatly since the 1960s. They are now active supporters of education reform and have made vigorous efforts to address the equity concerns of students.

The views that the Congress holds on these two issues will help to frame its choices of options, which can be grouped into three broad strategies. First, the federal government could reduce its role in education and support efforts by the states to reform the schools. Second, the federal government could maintain, and perhaps refine, its current role, focusing its attention on equal educational opportunity. Third, the federal government could actively promote restructuring of the U.S. education system to foster excellence in education.

Options for Reducing the Federal Role

In the past 10 years, virtually every state has initiated reforms in its education system to improve the performance of its students. Because states have become so active in promoting school reform, the Congress could consider reducing the role of the federal government in education and placing more responsibility on state governments. The leadership now exercised by the states contrasts with their behavior in the past when they were castigated for being unresponsive to national concerns about

educational equity and excellence and when critics pushed for federal intervention. Especially noteworthy in the new activism of the states has been the role of the governors in developing national education goals.

One way for the federal government to reinforce the efforts of the states while reducing federal control of education is to consolidate existing federal programs into a block grant. The grant could broadly define the purposes to be addressed with the funds but not specify in any detail the steps or procedures to be followed in achieving those purposes.

In particular, the Congress could consider creating a block grant to serve students with special needs. With that kind of grant, state and local authorities would have greater discretion than they have with the existing separate categorical grants to determine the best use of federal funds. Because state and local authorities are closer to the students to be served, they are likely to be in a better position than federal officials to determine which services will be most effective from an educational perspective. However, current federal priorities for serving students with special needs would not necessarily be preserved with such a grant. Support for federal programs could erode as a result, especially if some of the funds were spent in ways that benefited students without special needs.

A second option would be to move more federal funds into an enlarged block grant for educational improvement similar to the current Chapter 2 program in the Elementary and Secondary Education Act. Because the governors have been leaders in education reform, the block grant funds could go to state governments to allocate as they saw fit. An advantage of such a strategy is that it would simplify federal involvement in education and focus it on improvement for all students. But some argue that, over time, federal funds might be substituted for the funds states now provide for education. In that case, total spending on education might be less than what it would otherwise have been.

Options for Refining the Current Federal Role

Refining the current federal role would maintain educational equity as the government's primary objective but also permit the Congress to better shape the expression of that goal through its choice of related options. Under this approach, state and local governments would continue to have primary responsibility for achieving educational excellence. But the Congress could, for example, adopt the national education goals issued by the governors and President Bush and require that all recipients of federal funds accept them. Although the national goals emphasize issues of excellence, each goal encompasses additional objectives that address associated concerns about equity that could be specifically targeted by federal programs.

Proponents of requiring recipients of federal funds to adopt the national goals argue that the goals express legitimate national aspirations for improving U.S. schools. Their nationwide use through federal programs would encourage state and local officials to raise education standards across the country. Critics object to such a requirement, arguing that it could divert attention and resources from the reform efforts now under way in many states and localities. The national goals would impose uniformity and might inhibit initiative and creativity.

Other specific options for refining the current federal role range from eliminating existing programs that are not specifically directed toward special groups of students to having current federal programs (for example, Chapter 1 of the Elementary and Secondary Education Act) place more emphasis on serving disadvantaged preschool children to adding programs that deal with unmet needs--such as those of disadvantaged inner-city youth. Focusing on students with special needs would answer those who contend that, although the academic performance of some federally targeted students has increased relative to that of other students over the past 20 years, substan-

tial differences in achievement remain. Consequently, federal programs are still needed as part of the national response to improving the performance of these students.

Critics argue that such an approach does not solve the basic problem that federal categorical programs inhibit states and school districts from working more creatively to improve education for all students. Some add that the federal government should play a different role to spur national efforts to improve schools.

Options for Enhancing the Federal Role

An alternative--and much bolder--role for the federal government is to promote the restructuring of education. Proponents of this route believe that the United States remains "a nation at risk" of failure and decline in the global economy because of poor academic performance by its students. Radically restructuring the education system would require that U.S. students be judged according to world standards of excellence and that they improve their performance to meet those standards. Under this option, the federal role would shift from providing supplementary services for certain categories of students to encouraging fundamental reform of schools to benefit all students.

An immediate issue in such a shift is how much national direction the federal government should provide. Several questions must be answered: Should the Congress adopt and promote the national education goals? Should the Congress support national academic standards embedded in curriculum frameworks that specify what students should know and be able to do? And should the Congress endorse a national system of assessments of student achievement?

Many who favor federal support for restructuring education advocate national goals, curriculum frameworks, and testing. They argue that these three elements constitute a platform that would allow the federal government to construct policies to radically improve the U.S. education system. The national goals provide a sense of direction for developing explicit national standards that could be embodied in curriculum frameworks. The frameworks, in turn, would provide an anchor for reforms in assessing the performance of students as well as a basis for holding schools accountable for the quality of the education that they provide.

Other observers, including some who prefer alternative approaches to restructuring education, maintain that it is premature to promote all three elements, especially national standards and tests. Any national yardstick--whether in the form of goals, standards, or tests--would be insensitive to the diversity in the reform efforts being made across the country. National academic standards, say these reformers, would be especially difficult to formulate; they could easily be set too high or too low. Until some kind of national consensus is reached about the desirability of national standards and a national system of assessments based on them, the federal role should be limited to supporting research and development in these areas.

Regardless of what the Congress chooses to do about these matters, it could consider promoting educational restructuring more generally through two different strategies. The first--school-based reform--is a "bottom-up" approach that calls for each school to better the education it provides by developing a vision for improvement and initiating those changes that are appropriate for its students and staff. Examples include school-based management, a somewhat diffuse term covering a variety of approaches that vest the individual school with responsibility for managing all aspects of the education process, and the so-called school choice programs, which allow students and their parents to select which schools to enroll in.

Advocates of school-based reform contend that effective reform must be achieved one school at a time by using incentives to foster improvements and by allowing for flexible responses to local problems. Making schools responsible for improving education would have the added benefit of bringing principals, teachers, students, parents, and the community together to work at making schools more effective. But other people question whether schools have the capacity for the kind of leadership needed to carry out fundamental restructuring. They contend that only outside agents of change could effectively prompt the needed improvements. Still other critics argue that school-based reforms using school choice would result in even greater variability than exists today in the quality of schools, and many poor and minority children might be enrolled in the worst schools because their parents lacked access to the information needed to choose wisely.

The second strategy that the Congress could consider is systemic reform. This "top-down" approach maintains that improvement in the schools rests on leadership that coordinates and aligns changes in all the major aspects of the education system--goals, curriculum frameworks, instructional materials, student assessments, and professional development strategies for training and retraining teachers, principals, and other administrators. Proponents of a systemic strategy hold that the reforms of the past decade have had limited effects because they have been fragmented and piecemeal. Improving the performance of students would require radical restructuring through coordinated changes, starting with the national goals and working through the curriculum frameworks and assessment procedures by which students and schools would be held accountable.

Opposing this strategy are those critics who argue that learning cannot be mandated. Although agreeing that goals are useful for providing a sense of direction, they maintain that national academic standards and assessment systems would not foster the kind of cooperation needed among students and teachers to improve education. Systemic reform, some opponents add, could be too rigid and over the long run could actually stifle change and prevent improvement.

Chapter One

Federal Education Programs and Education Reform

During the term of the 103rd Congress, many of the major federal programs that provide funds for elementary and secondary education will come up for reauthorization. These programs address a variety of educational matters, including supplemental educational services for disadvantaged students, school improvement, magnet (or special program) schools for desegregating school districts, assistance to schools in federally affected areas (Impact Aid), bilingual education, Indian education, mathematics and science education, and drug-free schools and communities. In 1993, funding for these programs totaled about $9.5 billion. (See the appendix for a list of the programs up for reauthorization and their funding levels.)

Since 1988, when the Congress last reauthorized most of these programs, the nationwide movement for education reform dating from the early 1980s has continued. A critical event in this movement was the President's Education Summit with the governors held in Charlottesville, Virginia, in September 1989. That meeting led to the adoption of national goals for education to be met by the year 2000. The governors also agreed to lead efforts to reform and restructure elementary and secondary education in their states.

Adopting national goals for education and continuing reform activities in the states raise the question of whether, and if so how, the role of the federal government should change, given these developments. In the past, the federal role in education has always been ancillary to that of state and local authorities who have traditionally provided schooling. For example, in 1990, those authorities provided 94 percent of the money spent on public elementary and secondary education, compared with the federal share of 6 percent. Yet the role of the federal government is more significant than the size of its contribution might suggest--in part because of legislated and court-ordered mandates, some of which require the provision of educational services.

Federal Education Programs

The federal government has never developed an overall plan or a consistent philosophy for the more than 50 programs that the Congress will consider for reauthorization in 1993. Although these programs occupy a prominent place in debates about national education policy, their complexity and diversity make it difficult even to discuss them collectively. They vary widely in their purposes, funding methods, size, administrative procedures, eligibility requirements, restrictions on the use of funds, and responsibilities of recipients. In many cases, data on the programs are limited; for example, current information on participation and effectiveness is not available for all of them.

Federal programs supporting elementary and secondary education can, however, be grouped under four basic purposes:

- Promoting equal educational opportunity for children who are disadvantaged, who have limited proficiency in English, who are disabled, who are Indians (Native Americans), who are female, or who are racial or ethnic minorities;
- Stimulating education reform through research and development, evaluation, innovation, demonstrations, and leadership;
- Providing limited general support for the operations of school districts in areas affected by federal installations or activities; and
- Promoting educational preparation for employment, including basic adult literacy skills.

Federal support is concentrated in programs that promote equal educational opportunity, which received about 70 percent of the funds in 1993. The remaining funding was divided as follows: about 14 percent went to programs to stimulate educational reform; about 5 percent provided limited general support; and about 10 percent financed educational preparation for employment (see Table 1).

Promoting Equal Educational Opportunity

The federal programs that promote equal educational opportunity are generally called categorical grant programs because they provide funding for specific ("categorical") purposes or types of students. For example, the Individuals with Disabilities Education Act, most of whose various parts expire in 1994, supports special services to children with disabilities. Other categorical programs whose authorizations expire in 1993 include those serving disadvantaged children, children with limited proficiency in English, and Indians.

Chapter 1. The largest federal program promoting equal educational opportunity is Chapter 1 of Title I of the Elementary and Secondary Education Act of 1965 (ESEA), as amended, which was last reauthorized as part of the Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988. Chapter 1 basic grants finance supplemental or compensatory educational services for educationally deprived children who live in areas with high concentrations of children from low-income families. Federal dollars are allocated through a formula based on the number of poor children in an area; however, the schools use these funds to provide compensatory services (such as teacher aides, specialized classes in reading or mathematics, and individualized instruction) to any students who are performing well below their grade level. Other parts of Chapter 1 fund state programs for children who are migrants, who are neglected or delinquent, or who have disabilities. Chapter 1 also includes a program that works with families to promote school readiness in children and literacy in their parents. More than 5 million children received services through Chapter 1 in 1992.

Bilingual Education. This program, which is intended to help develop proficiency in English, is aimed at children for whom English is a second language.[1] It consists of discretionary grants to local education agencies and also supports training and technical assistance. In 1991, the program supported more than 800 projects serving more than 300,000 students, or about 15 percent of the students classified by the states as having limited proficiency in English.

Indian Education. The Indian Education Act provides grants to local education agencies and Indian-controlled schools to support programs that address the special educational and culturally related academic needs of

1. The program originated in 1968 but is now Title VII of the Hawkins-Stafford School Improvement Amendments of 1988.

Table 1.
Appropriations for Federal Education Programs That Support Elementary and Secondary Education, by the General Purpose of the Program (By fiscal year, in millions of 1993 dollars)

Program/Function	1980	1990	1993	Percentage Change, 1980-1993	Percentage Distribution, 1993
Promoting Equal Educational Opportunity					
Chapter 1/Title 1	5,573	5,980	6,826	22	48
Bilingual Education	299	177	196	-34	1
Indian Education	135	82	80	-41	1
Special Education	1,885	2,298	2,844	51	20
Other	13	44	40	204	a
Subtotal	7,906	8,580	9,986	26	70
Stimulating Education Reform					
Chapter 2[b]	1,302	544	474	-64	3
Drug-Free Schools	n.a.	620	598	n.a.	4
Eisenhower Mathematics and Science Education	n.a.	151	275	n.a.	2
Magnet Schools	n.a.	125	108	n.a.	1
Research and Development[c]	284	259	298	5	2
Other	190	153	204	8	1
Subtotal	1,775	1,852	1,958	10	14
Providing Limited General Support					
Impact Aid	1,534[d]	817	750	-51	5
Promoting Educational Preparation for Employment					
Adult Education	179	222	305	70	2
Vocational Education	1,410	1,053	1,177	-17	8
Subtotal	1,589	1,275	1,482	-7	10
All Programs					
Total	12,804	12,524	14,176	11	100

SOURCE: Congressional Budget Office estimates based on information from the Department of Education.

NOTE: n.a. = not applicable. Some funds from some programs also support postsecondary education. Numbers may not add to totals because of rounding.

a. Less than 0.5 percent.

b. Chapter 2, which was established by Congress in 1982, consolidated a number of education programs, about 20 of which received funding in 1980.

c. Includes funds for education research, statistics, and assessment, and for libraries.

d. Includes disaster assistance.

Indian children.[2] In 1992, about 70 percent of the funding was allocated by formula; the remainder was awarded through competitive grants. In 1991, almost 1,200 education agencies enrolling more than 350,000 Indian children received funding. Other education programs for Native Americans are funded through the Bureau of Indian Affairs in the Department of the Interior.

Program Evaluation. The available research on the effectiveness of the above programs is limited and does not always provide clear guidance for policymaking. For example, research has shown that students who receive Chapter 1 services experience greater gains in academic achievement than comparable students who do not receive services. But the increases are not large, and the compensatory education provided through these services--usually in the elementary school years--has few, if any, long-term effects on students' cognitive skills.

Research on bilingual education offers varying results as well. Studies have found that children enrolled in bilingual education programs learn English as fast or faster than comparable students who are not enrolled in such programs. Research also suggests that students enrolled in "immersion" programs, in which instruction is almost exclusively in English, can do as well as students enrolled in programs in which some instruction is conducted in their native language.

Researchers have also found that Native American children fall behind other children in academic achievement as they progress through school. On nonverbal aptitude tests, however, Native American students perform at levels comparable to the national norms. These findings suggest that improving Native American schools and programs could boost the achievement levels of Native American students.

2. Originally enacted in 1972, the program was reenacted as Title V of the Hawkins-Stafford School Improvement Amendments of 1988

Stimulating Education Reform

In the 1950s, the federal government launched several programs to improve elementary and secondary education, including the development of better curricula in science and mathematics through the National Defense Education Act of 1958. In 1993, four major federal programs supporting school improvement are slated for reauthorization by the Congress.

Chapter 2. The Federal, State, and Local Partnership for Educational Improvement, Chapter 2 of Title I of ESEA, is a block grant to state and local educational authorities for programs to improve elementary and secondary education for students in public and private schools. States and localities determine which projects to fund within broad guidelines set by the legislation. Block grant funds have supported a wide variety of activities that affect all types of students. Program activities have included curriculum and staff development and instructional and student support services. In 1989, more than 40 percent of the funding disbursed at the state level was directed toward schoolwide improvement programs, including so-called effective schools projects.

Drug-Free Schools and Communities. The Drug-Free Schools and Communities Act of 1986, as amended (most recently in 1990), provides aid to state and local educational agencies for programs of alcohol and drug education and prevention. The programs include formula grants to states and competitive grants for the training of personnel. In 1989, funds from the Drug-Free Schools and Communities program went to about 80 percent of school districts nationwide and reached about 95 percent of students enrolled in public schools. The number of states that require some form of drug education has increased since the program began and in 1989 totaled 30.

Mathematics and Science Education. Funds provided through the Eisenhower Mathematics and Science Education programs

go to state and local education agencies (as well as postsecondary institutions) to improve the skills of teachers and the quality of instruction in mathematics and science in public and private schools.[3] In the 1988-1989 school year, at least one-third of all mathematics and science teachers received services funded by this program. Professional development, including training for current teachers, was the focus of most of this support.

Magnet Schools. The Magnet Schools Assistance Program aids school districts that are undergoing desegregation. Planning and promotion of special instructional programs and services for funded schools, purchases of materials and equipment, and salaries of teachers at magnet schools are the major uses of the funds. Research has found that magnet schools can be effective in promoting desegregation and in providing high-quality education (in both academic and vocational subject areas) in urban school districts. In 1991, 64 school districts in some 20 states received assistance.

Providing Limited General Support

Impact Aid (Public Law 81-874) provides limited general support by compensating school districts that have children who are enrolled there because their parents live or work on federally owned or subsidized property. Because property of that type is tax-exempt, Impact Aid compensates school districts for the forgone property tax revenues that would have supported the schools. In 1990, about 2,500 of the 15,400 school districts nationwide received Impact Aid. The authorization for the program expires in 1993.

Determining whether a school district needs this aid is difficult because it is impossible to determine what the value of property (or the cost of education) in a school district would be without federal activity. Research has found, however, that Impact Aid for students whose parents both live and work on federal property (category "a" children) tends to go to small districts with low property wealth and high per-pupil expenditures. Impact Aid for students whose parents live or work on federal property (category "b" children) tends to go to districts with large enrollments, a number of which have high property values and high per-pupil expenditures.

Promoting Educational Preparation for Employment

The potential contribution of education to economic productivity was the first so-called national interest expressed in federal legislation on education. Major federal programs supporting preparation for employment and increased economic productivity are the Carl D. Perkins Vocational and Applied Technology Education Act and the Adult Education Act, both of which expire in 1995. Several small programs of this type, including Adult Education for the Homeless, expire in 1993.

The Perkins Vocational and Applied Technology Education Act helps states expand and improve programs of vocational education--that is, occupationally specific instruction in such areas as business math, industrial arts, electronics, and office management. The act also helps states provide equal educational opportunity in vocational education for people who have traditionally found it difficult to acquire the marketable skills they need for employment.

The Adult Education Act supports activities to improve educational opportunities for adults so that they may become literate, complete high school (usually by earning a GED--General Educational Development--certificate), and enroll in employment-related training. The legislation includes a National Workplace Literacy Program of competitive demonstration grants to partnerships com-

3. This program is authorized in Title II of the Hawkins-Stafford School Improvement Amendments of 1988.

posed of education organizations and business and community groups.

How the Current Federal Role Developed

The current federal role in elementary and secondary education developed fitfully, often as part of a set of responses to larger national concerns. Before the 1960s, the federal government had only a handful of major education programs. They included Vocational Education, which was authorized in 1917 to support vocational training in high schools; Impact Aid, which began in 1950 during the Korean War; the science education component of the National Science Foundation, which also started in 1950 as the Cold War with the former Soviet Union expanded; and the overseas elementary and secondary schools run by the Department of Defense, which serve dependents of military personnel.

In the 1960s, the federal role in education expanded dramatically in response to the initiatives of President Lyndon B. Johnson to advance social justice by conducting a national war on poverty. Important legislative accomplishments of this era include the Economic Opportunity Act of 1964, which created (among other things) the Head Start program to provide educational and related services for preschool-age children, and the Civil Rights Act of 1964, which prohibited discrimination in the use of federal funds.

Perhaps the most politically difficult achievement, however, was the passage of ESEA in 1965, because it required that legislators deal with the persisting issues of race, religion, and the tradition of local control in education. In the early 1960s, many people opposed federal aid to education, fearing that it would shore up segregated school systems in the South, fund religiously affiliated private elementary and secondary schools, or lead to the creation of a national ministry of education. The Civil Rights Act of 1964 allayed concerns about racial segregation, and ESEA was written to include aid to children attending private schools under the legal theory that the aid benefited the child, not the private institution. The issue of local control in education was resolved by the federal government's pledging that no provision of ESEA "should be construed to authorize any department, agency, office or employee of the United States to exercise any direction, supervision, or control over the curriculum, program of instruction, administration, or personnel of any education institution, school, or school system."

After the passage of ESEA, federal legislation affecting elementary and secondary education increased significantly, although many of the new programs established by these laws were quite small.[4] One of the more important pieces of legislation was the Emergency School Aid Act of 1972, which provided aid to desegregating schools. Another was the Education for All Handicapped Children Act of 1975, which mandated that disabled children be given a free, appropriate education designed to meet their individually determined needs and pledged that the federal government would provide 40 percent of the costs of doing so. (The government has not actually provided funding at that level.) This legislation was reenacted as the Individuals with Disabilities Education Act of 1990.

Several developments stemmed from the legislative activities of the 1960s and 1970s. One was an increasing concern about how to

4 Programs passed after ESEA include Bilingual Education, Emergency School Aid, Indian Education, Adult Education, Basic Skills, Gifted and Talented Education, Women's Educational Equity, and Education of the Handicapped, plus programs supporting the development of new curricula in schools--namely, Environmental Education, Consumer Education, Career Education, and Ethnic Heritage Education. During the 1970s, the equal educational opportunity protection of Title VI of the Civil Rights Act of 1964 was extended to disabled people, children with limited English proficiency, women, and the elderly, obligating recipients of federal aid to provide services to these groups. See Joel S. Berke and Mary T. Moore, "A Developmental View of the Current Federal Government Role in Elementary and Secondary Education," *Phi Delta Kappan* (January 1982), pp 333-337.

carry out the federal programs effectively. Studies were conducted to assess how to improve programs, and various adjustments were subsequently made through legislation and regulations. Another response was the development of a wider perspective on federal programs and the purposes they served. The numerous federal programs enacted in the 1960s and 1970s mostly addressed concerns about equity in educational opportunity associated with narrowly defined groups of students. Some observers suggested that broader issues involving the quality of schooling available to all students were not receiving the attention they deserved at the national level. Others noted problems in coordinating the different programs, especially when individual students needed resources from more than one source. These concerns led to various proposals to create block grants, which would incorporate a number of categorical programs and allow flexibility in meeting federal objectives and in delivering services to students.

The election of Ronald Reagan as President in 1980 brought a number of changes in the federal role in elementary and secondary education. One was to create a block grant--Chapter 2 of ESEA--that grouped more than 20 categorical grant programs together under the broader purpose of fostering school improvement, largely as defined by state and local officials. The program represented a new effort by the federal government to focus on issues of "excellence" in education in addition to the continuing focus on "equity" represented by many of the categorical programs. A second change built on the Department of Education created in 1980 with the support of President Jimmy Carter. The secretaries of education under Presidents Reagan and Bush (T.H. Bell, William J. Bennett, Lauro F. Cavazos, and Lamar Alexander) used their office as a bully pulpit to focus attention on issues concerning the quality of American education. Perhaps the culmination of their efforts was the summit meeting of President Bush and the governors, which led to the adoption of national goals for education for the year 2000. Preceding this meeting, however, were a series of nationwide efforts geared toward school reform.

The School Reform Movement

The federal government was not the only active force in the education arena in the 1980s. During that decade, many states and localities initiated school reforms. So much has been written about improving education and so many new practices were tried in those years that it has become common to talk about "waves" of reform. The first wave generally dates from 1983 when the Reagan Administration's report, *A Nation at Risk*, was issued. The second wave started in 1986 with the release of another set of reports, including *Time for Results*, by the National Governors' Association, and *A Nation Prepared: Teachers for the 21st Century*, by the Carnegie Forum on Education and the Economy. The third wave may be said to have gotten under way with the initiation of the national goals for education in 1989.

The First Wave

The impetus to improve the quality of elementary and secondary education gained a national focus in 1983, when more than 10 major reports or studies on school problems were released.[5] One of the first and probably the best known is *A Nation at Risk*, which was issued by the National Commission on Excellence in

5 Among these reports were Task Force on Education for Economic Growth, *Action for Excellence* (Denver: Education Commission of the States, 1983); Ernest Boyer, *High School: A Report on Secondary Education in America* (New York: Harper and Row, 1983); Philip L. Cusick, *The American High School and the Egalitarian Ideal* (New York: Longman, 1983); Sarah Lawrence Lightfoot, *The Good High School* (New York: Basic Books, 1983); Theodore Sizer, *Horace's Compromise: The Dilemma of the American High School* (Boston: Houghton Mifflin, 1984); John I. Goodlad, *A Place Called School* (New York. McGraw-Hill, 1983); Diane Ravitch, *The Troubled Crusade* (New York: Basic Books, 1983).

Education appointed by then Secretary of Education T.H. Bell.

The report expressed the fear that U.S. high school students might now be scoring lower on achievement tests than when Sputnik was launched in 1957, and called for school reform to stem what it said was a "rising tide of mediocrity" in education. The concern motivating the report was that, unless schools improved, workers in the United States would not be able to compete effectively in global markets. The result would be a decline in the U.S. economy and an erosion of the nation's standard of living.

The barrage of criticism of U.S. schools that these reports and studies represented was probably unprecedented. The outpourings came, moreover, from a wide range of sources--governors, business executives, university presidents, foundation directors, academics, parents, and students, in addition to educators. Their basic message was that U.S. schools--especially high schools--can and must be improved. Although their recommendations for achieving that improvement sometimes conflicted, their critiques had several common themes. First, expectations of what students should know and be able to do are too low. Too many students are graduating from high school without the knowledge and skills necessary to be productive workers in a global economy. Second, the secondary school curriculum has been diluted and diffused; it lacks a central focus on academic achievement. Third, the time U.S. students spend studying is too short. More homework and a longer school day and school year are needed. Fourth, teachers should be required to meet higher standards and should receive higher salaries based on merit principles.

Many of these criticisms found a receptive audience in the states. Within two years of publication of the reports, more than 40 states had increased their standards for high school graduation. Almost 40 states instituted new programs or revised their current programs of student testing and evaluation. Twenty-seven states increased instructional time, and about 35 states raised their standards for teacher preparation or certification. States were also prepared to increase spending on education. By 1985, 15 states passed or considered increases in state sales or income taxes to help fund education. Several states coupled education reform with changes in the finance laws that determine how state and local funds are used to support the schools. In part, these changes responded to critics who argued that many states do not fund their schools equitably and who called for equalizing spending among school districts within states.

The Second Wave

By 1986, the wave of reform set off in 1983 had rippled into other areas, bringing at least eight new reports by the end of that year.[6] These reports amplified concerns raised by earlier studies and raised new issues covering elementary as well as secondary schools.

Teaching and learning were the focus of several of the reports. Among their recommendations were better training for teachers and new standards for what teachers should know and be able to do. The reports argued for enhancing the professionalism of teachers by augmenting their knowledge, rights, and responsibilities and by increasing beginning salaries to attract more able candidates.

Several reports advocated making the school as a whole the key agency in education reform. Reformers urged that policies be based on findings from the research literature regarding the characteristics and programs that produce effective schools. Their goal was to restructure education by promoting school-

6. See, for example, National Governors' Association, *Time for Results* (Washington, D.C. National Governors' Association, 1986); Education Commission of the States, *What Next? More Leverage for Teachers* (Denver: Education Commission of the States, 1986); Task Force on Teaching as a Profession, *A Nation Prepared: Teachers for the 21st Century* (Washington, D.C. Carnegie Forum on Education and the Economy, 1986), Department of Education, *What Works: Research About Teaching and Learning* (1986).

based management under the leadership of skillful principals.

During the second wave of reform, programs of school choice--which allow parents and students to choose schools other than those in their area of residence--gained a wider hearing as an alternative strategy for improving education. A report issued in 1983 had advocated school choice as a way to reform education, but at the time the idea was not taken up in many areas of the country.[7] More attention was paid to school choice proposals after Minnesota initiated a program in 1985 allowing enrollment options for high school students.

State initiatives to reform education were highlighted in several reports, including those by the National Governors' Association (NGA) and the Education Commission of the States, which is also headed by a governor. The NGA report indicated that the governors wanted to lead education reform. They realized that drastic changes would be necessary to increase students' achievement, including restructuring the education system by vesting schools with authority to make key decisions about educational matters and personnel. The report also noted that effective systems of accountability must be created to link rewards and incentives to the performance of students at the level of the individual school.

The states followed up on many of the recommendations in these reports. Starting from a largely passive role in preparing and certifying teachers, they became more actively involved in other efforts related to teachers--for example, attracting, training, testing, and licensing them. By 1988, 29 states had instituted tests for students who wanted to enroll in teacher education programs, 37 states required prospective teachers to pass tests for initial certification, 21 states had alternative programs for teacher certification to attract teachers from a wider range of backgrounds, and 32 states had programs to help first-year teachers adjust to the rigors of the classroom.

Many states also moved to restructure their organizational and managerial relationships with school districts and schools. By 1989, 27 states had passed legislation to foster restructuring, and 8 others were seriously considering such plans. Although different states focused on various school levels and types of pupils, the overall direction of their new legislation was to decentralize authority and shift decisionmaking to the school. Their intent was to persuade administrators, teachers, and parents to work together to determine the strategies and arrangements that would foster learning most effectively in a school or program. One of the most dramatic of these attempts to restructure the education system was the Illinois state legislature's Chicago School Reform Act of 1989. The act established local school councils, consisting of parents, community members, teachers, and the principal, for every one of Chicago's 540 schools.

The Third Wave

The latest wave of national reform can be dated from the Education Summit in September 1989. Meeting in Charlottesville, Virginia, President Bush and the governors initiated discussions that resulted in six national goals for education to be met by the year 2000 as a spur to restructuring U.S. schools and increasing expectations for student performance. (See Box 1 for the goals and their corresponding equity objectives.) Serving as a model for that effort was the set of 12 education goals established in 1988 by the Southern Regional Education Board (under the leadership of governors) for 15 states.

A National Education Goals Panel consisting of governors (one of whom was the chair of the panel), Members of Congress, and representatives of the Administration was created to report annually on progress toward the goals. In considering how to measure progress in academic content (goals 3 and 4) for its first

7. See Twentieth Century Fund, Task Force on Federal Elementary and Secondary Education Policy, *Making the Grade* (New York: Twentieth Century Fund, 1983)

Box 1.
The National Education Goals

GOAL 1: By the year 2000, all children in America will start school ready to learn.

All disadvantaged and disabled children will have access to high quality and developmentally appropriate preschool programs that help prepare children for school.

Every parent in America will be a child's first teacher and devote time each day to helping his or her preschool child learn; parents will have access to the training and support they need

Children will receive the nutrition and health care needed to arrive at school with healthy minds and bodies, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems

GOAL 2: By the year 2000, the high school graduation rate will increase to at least 90 percent.

The nation must dramatically reduce its dropout rate, and 75 percent of those students who do drop out will successfully complete a high school degree or its equivalent

The gap in high school graduation rates between American students from minority backgrounds and their nonminority counterparts will be eliminated

GOAL 3: By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

The academic performance of elementary and secondary students will increase significantly in every quartile, and the distribution of minority students in each level will more closely reflect the student population as a whole.

The percentage of students who demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially

All students will be involved in activities that promote and demonstrate good citizenship, community service, and personal responsibility.

The percentage of students who are competent in more than one language will substantially increase.

All students will be knowledgeable about the diverse cultural heritage of this nation and about the world community

report in 1991, the panel concluded that national education standards defining what students should know and be able to do, along with new methods of assessing the success of students in meeting the goals, should be considered.

In response to the panel's efforts, the Congress created a National Council on Education Standards and Testing (NCEST) in June 1991 to consider whether voluntary national standards and tests were desirable and feasible. The council roster included Members of Congress and Administration officials, governors and state legislators, officials of teachers' unions, education researchers, and business representatives. In its January 1992 report, NCEST endorsed "world-class" national education standards that would be tied to voluntary assessments.

Voluntary standards were suggested for students as well as for schools and school systems. For students, the council recommended standards in the five core areas specified in the national goals (English, mathematics, science, history, and geography), as well as in other areas such as foreign languages and the

Box 1.
Continued

GOAL 4: By the year 2000, U.S. students will be first in the world in science and mathematics achievement.

Math and science education will be strengthened throughout the system, especially in the early grades.

The number of teachers with a substantive background in mathematics and science will increase by 50 percent.

The number of U S. undergraduates and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly

GOAL 5: By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

Every major American business will be involved in strengthening the connection between education and work.

All workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs

The number of quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and mid-career students will increase substantially.

The proportion of those qualified students (especially minorities) who enter college, who complete at least two years, and who complete their degree programs will increase substantially.

The proportion of college graduates who demonstrate an advanced ability to think critically, communicate effectively, and solve problems will increase substantially.

GOAL 6: By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

Every school will implement a firm and fair policy on use, possession, and distribution of drugs and alcohol.

Parents, businesses, and community organizations will work together to ensure that schools are a safe haven for all children.

Every school district will develop a comprehensive K-12 drug and alcohol prevention education program. Drug and alcohol curriculum should be taught as an integral part of health education. In addition, community-based teams should be organized to provide students and teachers with needed support

arts. For schools and school systems, it advocated standards for the delivery of educational services to ensure that students had the opportunity to learn the materials on which they would be assessed.

NCEST also concluded that it was both desirable and feasible to develop new methods to assess the progress that U.S. students make toward meeting world-class standards. Such measures would involve performance-based tasks that would be of greater value than the current, widely used standardized tests in improving instruction and student learning. (Standardized tests have been criticized for not being closely aligned with the curricula of schools.) Because these assessments could be tied to high school graduation or college admission--in other words, they could be tests with "high stakes"--a national effort was needed to produce high-quality measures of educational outcomes that were valid, reliable, and fair.

Follow-up to NCEST's recommendations took several forms at the national level. The 102nd Congress considered (but did not pass) legislation that would have supported devel-

oping national standards for the content of curricula and of assessment methods linked to those standards.[8] Even without legislation, various groups undertook to develop national standards. For example, the National Council of Teachers of Mathematics developed standards for mathematics knowledge in 1989, and the National Academy of Sciences is developing standards for science. Further work on standards is also occurring in history, the arts, civics, English, foreign languages, and geography (funded by the Department of Education) and in social studies (supported by the National Council for Social Studies).

Some states have initiated education reforms that complement the agenda sketched out by the National Education Goals Panel and NCEST. For example, California and South Carolina appear to be making what could be called efforts at systemic reform, linking state education goals, curriculum frameworks that define what students should learn and when they should learn it, and assessment methods to find out how well they are doing. Other states are considering measures similar to NCEST's recommendations. In addition, several foundations interested in education reform have funded projects in various parts of the country. Prominent among them are efforts sponsored by the Carnegie Forum on Education and the Economy to demonstrate how national standards and new forms of assessment could improve U.S. education.

8. The 102nd Congress considered adopting a number of NCEST's recommendations in the Neighborhood Schools Improvement Act (see U.S House of Representatives, "Neighborhood Schools Improvement Act. Conference Report to Accompany S 2," Report 102-916, September 25, 1992). The House agreed to adopt the recommendations (the original legislation was H R. 4323), but the Senate did not.

Recent reports and reforms underscore the continuing interest in improving schools to increase the job skills of workers. Recommendations in 1990 from the Carnegie Forum's *America's Choice: High Skills or Low Wages!* helped shape legislation on education that was adopted recently by the state of Oregon. The Secretary's Commission on Achieving Necessary Skills (SCANS) in the Department of Labor released *What Work Requires of Schools* in 1991. Both studies emphasize the need for higher levels of academic achievement by students who go directly into the work force after high school.

Has Education Changed Over the Past Decade?

The reforms of the past decade provide a compelling context in which to explore options to modify the role of the federal government in education. Before doing so, however, it is useful to examine the changes that have occurred in the condition of education in the United States during this time. The effects of intended improvements in schooling often take years to be known--the achievement of high school graduates is the result of 12 or more years of schooling, for example. But reformers began addressing virtually every aspect of the U.S. education system in the early 1980s, and better data are now available on students and schools. As part of the background for considering possible changes in the federal government's role in education, the next chapter examines trends in student performance, school financing, and the characteristics of students and their families.

Chapter Two

A Profile of American Elementary and Secondary Education

The waves of education reform that started in the early 1980s made the condition of education in the United States a major public issue and led many people to become involved in reform initiatives. Policymakers and others often sought out the available data on education to understand what was happening in the schools and to help shape their proposals for reform. They quickly learned, however, that good national indicators of excellence and equity in elementary and secondary education were scarce, especially measures of student performance such as academic achievement and rates of graduation. In some cases, national data covered only selected groups of students and were not representative of all students. For other areas of interest, data simply were not available. Reformers also rediscovered what education researchers had found earlier: learning is shaped by what happens in families and communities as well as in schools. Any full accounting of student performance must consider not only conditions in the schools--the primary focus of federal education programs--but also those in families and communities.

During the 10 years since *A Nation at Risk* appeared, the quality and scope of information about education have improved--especially about the outcomes for students and about conditions in their schools and families. Further progress is still needed, but enough data are available to sketch the contours of recent changes in the U.S. system of education.

Outcomes of Education

Society assigns schools the primary responsibility for teaching children the knowledge, skills, and attitudes they need to be successful students, skilled workers, competent parents, and informed citizens. The national education goals manifest this charge. For example, they call on schools to ensure that students master challenging subject matter and learn to use their minds well so that they will be prepared for further learning, productive employment, and active citizenship. But before schools can be held responsible, some means must exist to assess whether and how well they are educating students. The conventional means for measuring the outcomes of education are standardized tests of academic knowledge and skills and the proportion of students who complete a course of study and graduate from high school.

Achievement on Standardized Tests

Virtually all U.S. students at some time during their schooling take standardized tests to measure their level of academic achievement. Although standardized tests have been criticized for various reasons since they were first developed in the early decades of the 20th century, they continue to be used because they

are generally less expensive and more objective--that is, reliable and valid--than other measures.

Scores from standardized achievement tests are used in three ways to assess educational outcomes. The first is by looking at trends in test scores. Trends can indicate changes in what students are learning--whether their performance is declining, improving, or staying the same. The second is by relating scores to standards of proficiency. The proportion of students who achieve a given standard can indicate what fraction has acquired an adequate (or basic or advanced) education. A fundamental issue in assessing test scores in this way is whether the standards used are meaningful. Low standards can result in all students being judged--erroneously--as meeting advanced levels of achievement; high standards can mean that few students are considered proficient. The third way to use test scores is by comparing them among units--schools, districts, states, or, especially, nations. Comparing national test scores can show, for example, how much students in one country have learned relative to students in other countries.

Trends in Test Scores. Two types of standardized tests are commonly used to track what students have learned in the United States. The first--and probably most widely reported--includes those tests taken mainly by high school seniors planning to go to college: the Scholastic Aptitude Test (SAT) administered by the Educational Testing Service and the test of the American College Testing Program (ACT).

In the early 1980s, trends in scores on these tests were widely viewed with alarm because they had been declining for some time. For example, SAT scores declined more or less continuously between the mid-1960s and 1980. Because these tests had been used for many years in decisions about college admissions, many people assumed that they were meaningful measures of the achievement of high school graduates. But not all graduates take the tests--only self-selected students who are assumed to be college bound. The characteristics of students taking these examinations change over time, however, and the proportion of these students who actually enroll in college is not known. As a result, trends in their scores cannot be used to draw valid conclusions about the achievement of American high school graduates or the quality of their schools.

Tests conducted as part of the Congressionally mandated National Assessment of Educational Progress (NAEP) provide the other commonly reported scores. NAEP surveys nationally representative samples of students ages 9, 13, and 17--that is, students who are typically in grades 4, 8, and 12. The subjects that have been routinely tested since the program's inception in 1969 include reading, mathematics, science, and writing.

Recently, the results from NAEP for the past 20 years or so were published in a form readily accessible to the public.[1] The trends in test scores in science, mathematics, reading, and writing show few changes in the achievement of U.S. students over the past two decades (see Figure 1).[2] In other words, today's students are performing at roughly the same levels that previous students achieved, although some changes were notable:[3]

- Although the lines in the figure show relatively little change, achievement in science as measured by NAEP declined significantly in the 1970s but improved significantly in the 1980s among all three age groups. The level of achievement among 17-year-olds in 1990 remained below that in 1969.

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1. See Department of Education, National Center for Education Statistics, *Trends in Academic Progress: Achievement of U.S. Students in Science, 1969-70 to 1990; Mathematics, 1973 to 1990, Reading, 1971 to 1990; and Writing, 1984 to 1990* (November 1991).

2. All figures appear at the end of the chapter.

3. Changes identified as "significant" were determined by NAEP to be statistically significant

- Proficiency in mathematics increased among 9- and 13-year-olds between 1973 and 1990, while among 17-year-olds it declined in the 1970s and then increased in the 1980s. By 1990, all age groups were doing better in mathematics than they had done in 1978.

- Between 1971 and 1990, performance in reading by 9-year-olds first increased and then decreased to approximately the starting level. Thirteen-year-olds showed virtually no change in reading proficiency. Achievement by 17-year-olds improved significantly.

- Although achievement in writing was relatively stable among fourth and eleventh graders during the 1980s, proficiency among eighth graders declined between 1984 and 1990.

Black and Hispanic students, on average, perform significantly below white students at all ages and for all of the curriculum areas tested by NAEP. Over the past two decades, however, the gap between the achievement of whites and minorities lessened, although it has widened slightly in a number of cases in the past few years (see Figures 2 and 3 for the gaps between whites and blacks and between whites and Hispanics, respectively). Blacks generally made relatively greater improvements than Hispanics, many of whom are recent immigrants. (The gains in achievement that minorities made relative to white students accord with an objective of the national education goals to reduce the gap in achievement between white and minority students while raising the levels of achievement of all students.)

Results from NAEP comparing the trends in test scores among whites, blacks, and Hispanics show several interesting patterns:

- Between 1970 and 1990, among white 9- and 13-year-olds, science scores remained stable, but among white 17-year-olds they dropped. In contrast, black and Hispanic 9- and 13-year-olds increased their levels of performance (although the increase was not significant among black 13-year-olds), and black and Hispanic 17-year-olds maintained their achievement. (Trends for Hispanics only cover the period from 1977 to 1990.)

- Among whites, only 9-year-olds improved their scores in mathematics after 1973, but black students at all three ages increased their proficiency in mathematics after that date, as did Hispanic 9- and 13-year-olds.

- Although proficiency in reading improved significantly among 17-year-old whites between 1971 and 1990, it was stable among white 9- and 13-year-olds. In contrast, reading achievement increased significantly among blacks in all age groups and among 17-year-old Hispanics. (Data for Hispanics start in 1975.)

- Scores from the writing assessment show that trends were similar among whites, blacks, and Hispanics and that the differences among their levels of achievement generally changed little between 1984 and 1990.

Standards of Academic Proficiency. Trends in NAEP test scores indicate that U.S. students are generally achieving about as much as they ever have or, in the case of minorities, a little more. But these results do not demonstrate that the nation's students are as competent in challenging subject matter--including English, mathematics, and science--as the national education goals command. To determine such competence requires explicit standards that embody judgments of what students should know.

The NAEP program took the first step in establishing standards of achievement when it constructed levels of proficiency known as anchor points to interpret trends in NAEP test scores extending back into the 1970s. Examples of three anchor points of ascending diffi-

culty in science proficiency are, first, that a student knows basic facts about an issue; second, that the student is able to apply that knowledge to an issue; and third, that the student is able to infer relationships and draw conclusions. Applying the levels of proficiency to NAEP scores reveals that most students are learning basic facts and skills but few are proficient at complex reasoning and problem solving. Gains since the 1970s have occurred largely in the mastery of lower-level skills and basic concepts.

The National Assessment Governing Board (NAGB), a body of 24 people that sets policy for NAEP, recently initiated the next step in constructing standards of performance. NAGB was created by the Congress in 1988 and charged with identifying "appropriate achievement goals" for each grade and subject that NAEP tests. Using an elaborate standard-setting process, the board adopted the first set of standards of achievement in mathematics to assess whether U.S. students are mastering complex subject matter. The standards delineated three levels of achievement: scoring at the basic level shows partial mastery of fundamental knowledge and skills; scoring at or above the proficient level demonstrates competency in challenging mathematical subject matter; and scoring at or above the advanced level proves superior performance in mathematics.

Applying the standards to the results of the 1990 NAEP mathematics assessment suggested that many students are not mastering complex subject matter. NAGB reported that more than one-third of the students tested in grades 4, 8, and 12 failed to meet even the standards for basic performance. Fewer than 20 percent met the standards for the proficient level or above, while the proportion reaching the advanced level ranged from less than 1 percent in grade 4 to almost 3 percent in grade 12. The proportion of students achieving proficiency varied by race or ethnicity, parents' education, type of community, and (for grade 12 students) number of mathematics courses taken. Asian/Pacific Islander students, for example, were more likely to be proficient than were students in other ethnic groups (see Figure 4). Even among the Asian/Pacific Islander group, however, a majority did not reach the proficient standard set by NAGB for any grade tested.

The standards of performance that NAGB developed have met with substantial criticism.[4] Charges include that the standards have little empirical validity, that they are unreliable because of methodological errors made in their development, and that they are too high, even when compared with the levels of achievement set by students in some Asian countries. In defense, NAGB has argued that the setting of standards always requires making judgments. While continuing to support its findings, NAGB has also contracted with ACT to review the standards for mathematics and to develop standards for the 1992 NAEP assessments in reading and writing as well as mathematics.

International Comparisons. Trends in NAEP test scores suggest that the overall level of achievement of U.S. students was stable or increased slightly during the 1980s. But some international comparisons of test scores in mathematics and science suggest that U.S. students are not achieving as much in these subjects as are students in many other countries. Instead of being first in the world by the year 2000, as called for in the national education goals, U.S. students frequently appear to be closer to last place among the developed countries.

Studies comparing the achievement in mathematics and science of students in the United States and in other countries have been conducted periodically since the 1960s. Among the most recent is the second International Assessment of Educational Progress (IAEP), which was conducted in 1990-1991. This study surveyed the science and math-

4. See, for example, the letter of March 11, 1992, from the General Accounting Office to Representatives William D. Ford and Dale E. Kildee. This letter is an initial response to their request to review the NAGB performance standards

ematics performance of 9- and 13-year-olds in both large and small countries.[5]

Among the major countries whose results were based on virtually all age-eligible children, the IAEP found that only in Korea did 9-year-olds score significantly higher in science, statistically speaking, than did similar students in the United States (see Figure 5). The scores of U.S. students were not significantly different from those of students in Taiwan, Canada, Spain, and the former Soviet Union, after taking sampling variability into account. In contrast, in mathematics, 9-year-old students in Taiwan, Korea, and the former Soviet Union scored significantly higher, on average, than similar students in the United States. After taking into account the variations in sampling associated with these tests, the results indicate that U.S. students scored about the same as did students in Spain and Canada.

Among 13-year-olds, students from Korea, Taiwan, and the former Soviet Union performed significantly better in science than did students in the United States. Similar students in Canada, France, and Spain performed at about the same level as students in the United States, again, after taking into account the variations in sampling. In mathematics, however, 13-year-olds in the United States were significantly outscored by similar students from all the other countries except Spain.

These findings--and similar ones in earlier international comparisons of achievement in mathematics and science--have caused some critics of education in the United States to ask why students here do not meet what they call world-class standards of achievement. Some researchers respond that methodological differences, especially in selecting samples of children for testing, could explain much of the difference in international scores.[6] (Some countries, for example, may restrict their samples to schools attended by their best students.) But this explanation does not appear to be compelling in the case of the results from the second IAEP, which were based on virtually all age-eligible children.

Cultural differences among nations also could account for some of the disparities in academic achievement. Foreign schools may be no more effective than U.S. schools in carrying out what is expected of them, but because other nations may value academic achievement more highly, their students do better on international tests. This explanation could vindicate U.S. schools but still leave the nation's students with a poor record of achievement compared with students in other countries.

Another explanation of the poor showing of U.S. students centers on differences among nations in their schools' curricula. Because such curricula may vary in their scope, depth, and difficulty, student scores may differ because of varying exposure to the subject matter being tested. For example, the Second International Mathematics Study found that so-called population A students (those in grade 7 in Japan and grade 8 in the United States) achieved higher scores in algebra in Japan than in the United States. But the mathematics curriculum in Japan is relatively homogeneous and demanding, whereas the curriculum in the United States is more varied. As a result, many students in the United States do not have extensive exposure to a demanding mathematics curriculum as students do in Japan.

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5. Performance in mathematics and science by 9-year-olds was assessed in 14 countries; performance by 13-year-olds was assessed in 20 countries Some countries drew samples from virtually all children in the appropriate age group, whereas others confined their assessments to specific geographic areas, language groups, or grade levels Only those countries surveying virtually all age-eligible children are discussed in the text, with the following exceptions In the Soviet Union, testing occurred only in Russian-speaking schools in 14 out of 15 republics. In Spain, students in Cataluña were not surveyed In Canada, 9-year-olds were tested in 4 out of 10 provinces (British Columbia, New Brunswick, Ontario, and Quebec), whereas 13-year-olds were tested in 9 out of 10 provinces.

6. See Iris C Rotberg, "I Never Promised You First Place," *Phi Delta Kappan* (December 1990), pp 296-303

Table 2.
Percentage of Correct Answers by U.S. and Japanese "Population A" Students to Algebra Questions in the Second International Mathematics Study, School Year 1981-1982

Category of Students	Percentage of Students	Percentage of Correct Answers to Algebra Questions
Japan		
All Students	100	60
Top Quintile in Overall Academic Achievement	20	68
United States		
All Students	100	42
Students Enrolled in an Algebra Course	14	67
Students Enrolled in an Enriched Mathematics Course	12	56
Students Enrolled in a Typical Mathematics Course	64	38
Students Enrolled in a Remedial Mathematics Course	11	25

SOURCE: Congressional Budget Office using data from Ian Westbury, "Comparing American and Japanese Achievement: Is the United States Really a Low Achiever?" *Educational Researcher* (June-July 1992), pp. 18-24, and unpublished analyses by Professor Westbury.

NOTE: The Second International Mathematics Study examined two samples of students, which were designated populations "A" and "B." In Japan, population "A" students were in grade 7; their mean age was 13.5 years. In the United States, population "A" students were in grade 8, their mean age was 14.1 years. Data for population "B" students, all in their high school years, are not reported here.

Comparing the top population A students in both countries--the top 20 percent in Japan and the 14 percent in the United States who took algebra--revealed virtually identical proficiency (see Table 2).[7] Unpublished analyses by the same researcher working at the University of Illinois compare students in the top tenth and top quarter of population A students in Japan and in the United States; the results show similar achievement in both countries. Among the bottom half of U.S. students, however, achievement in mathematics is significantly lower than among comparable students in Japan. By implication, if the curriculum in the United States were strengthened, students here--especially those scoring below average--would improve their performance.

The subject matter on which students are tested may also make a difference in the rankings among countries, as indicated by the results of a recent assessment of reading skills among 9- and 14-year-olds. Compared with students in 30 other nations, U.S. 9-year-olds ranked among the three highest-scoring groups. Relative proficiency declined with age, however, and U.S. 14-year-olds dropped to 10th place. Still, U.S. students did relatively better in reading than in mathematics. However, the reading assessment focused on basic literacy (narrative storytelling, exposition, and document use), not the higher-order thinking skills that the national goals promote. Consequently, it would be unwise to place too much emphasis on the assessment's otherwise encouraging results.

Completion of High School

The progress made by some students (especially minorities) during the 1980s has been met with reservations. Some analysts, for example, have expressed the fear that these gains in achievement--which may reflect higher academic standards--might have come at the expense of higher dropout rates. The im-

7. See Ian Westbury, "Comparing American and Japanese Achievement: Is the United States Really a Low Achiever?" *Educational Researcher* (June-July 1992), pp. 18-24

portance placed on this aspect of schooling is reflected in the national education goals, which call not only for improving academic proficiency but also for increasing the rate of high school completion to at least 90 percent of all students. In addition, by the year 2000, the goals call for reducing the difference between the rates of graduation of white and minority students.

Indications are that many states increased academic standards in the 1980s but that dropout rates did not rise. One measure of the higher expectations that states had for their graduating students is the number of so-called Carnegie units (basically, one-year courses) that these students had earned (completed). During the 1980s, students increased the average number of overall and academic (as opposed to vocational or personal use) credits earned in high school--from 21.3 Carnegie units in 1982 to 22.8 in 1987. Although black and Hispanic students graduated with fewer total and academic credits than white (and Asian/Pacific Islander) students during the 1980s, they increased their course loads over this period (see Figure 6). By 1987, they were earning more credits than did whites in 1982.

Along with increases in course loads and steady or increasing NAEP scores, the high school dropout rate declined and the completion rate rose between 1980 and 1990. Although the rate of high school completion by students aged 19 to 20 did not reach the national education goal of 90 percent, it nevertheless rose to about 83 percent in 1990. Gains in rates of completion and reductions in dropout rates were especially notable for black and Hispanic students; as a result, the gaps between the dropout and completion rates of whites and minorities narrowed (see Figure 7). Furthermore, the proportion of high school graduates who entered college in the fall following graduation also rose during the 1980s, reaching a record level of more than 60 percent in 1990, up from 49 percent in 1980. This proportion increased most among white students; nevertheless, the proportions of black and Hispanic students who proceeded directly to college also increased during the 1980s.

The record shows that the performance of U.S. students got better during the 1980s. But critics contend that the rate of improvement in performance was too slow to achieve the national goals for education by the year 2000 even if similar gains in performance were to continue throughout the 1990s. Some of these critics argue that the national goals can be achieved only by restructuring the system of education in the United States. Any such restructuring, however, is affected by both the resources available for the schools and the characteristics of the families and communities of U.S. students.

Resources of Schools

The movement to reform education during the 1980s also generated concern about the amount and distribution of resources available for education. Some people argued that education was not receiving the financial support it needed, especially if the national goals were going to be attained, and that available funds were not allocated equitably. Others countered that many schools had more funds than they could efficiently spend and that higher expectations, not more spending, was the key to raising the level of academic performance of students. In the debate about the resources that should be available to the schools, those that have probably received the most attention are expenditures for education and for teachers.

Spending on Education

Spending on education is a broad indicator of the resources available to educate children. In the 1980s, financial support for elementary and secondary schools rose substantially. Between the 1981-1982 and 1990-1991 school years, after adjusting for inflation, expenditures per pupil in the public schools rose 35 percent (see Figure 8). In the 1990-1991 school year, public schools spent an average of

about $5,400 per pupil (in 1992 dollars). In increasing the amounts they were spending on public elementary and secondary education during the 1980s, U.S. taxpayers also allocated a larger share of their available resources to that schooling. Funding per pupil as a share of personal income per capita increased from 25.7 percent in school year 1979-1980 to 28.7 percent in school year 1990-1991.

The increased resources allocated to public schools during the 1980s largely reflected more funding from state and local governments (see Figure 9). Support for public elementary and secondary education from state governments increased about 33 percent between 1980 and 1990 in dollars adjusted for inflation, whereas funds from local governments rose more than 40 percent over that period. In contrast, school funding from the federal government declined, after adjusting for inflation.

Throughout the 1980s, schools received the largest share of their funds from state governments. In school year 1989-1990, the state share of public school funding was more than 47 percent, while the share from local governments was slightly below 47 percent. The proportion of funds received from the federal government was about 6 percent.

Although resources are at a record level in public elementary and secondary schools, expenditures per pupil vary among and within states. Interstate differences in per-pupil expenditures for education are substantial, reflecting, in part, differences in personal income per capita and in the cost of living (see Figure 10). In the 1989-1990 school year, expenditures per pupil adjusted for state differences in the cost of living ranged from $7,900 in the District of Columbia, which spent the most, to $3,400 in Utah, which spent the least (in 1992 dollars). The disparity between states that spent the highest and lowest amounts, which is expressed as the spending ratio, decreased over the 1980s, falling from 2.8 in 1980-1981 to 2.3 in 1989-1990.

These disparities in spending also affect the allocation of federal aid: substantial amounts of it are allocated using formulas that include the state's average expenditure per pupil as a proxy for the cost of education. For example, the formula for distributing funds for compensatory education from the Chapter 1 program uses this figure. A variety of other factors also affect the allocation of federal aid to education among the states. As a result, the states receive varying levels of aid, both in dollar amounts and as a share of total funding for a state's schools. Overall, federal aid ranges from 2.8 percent of funding for public elementary and secondary schools in New Hampshire to 15.5 percent of funding in Mississippi in school year 1989-1990.

Intrastate disparities in expenditures per pupil have been a concern at least since early in this century. These disparities derive in part from the way states finance their education systems. Local education authorities raise revenues through taxes on local property whose average value varies considerably among school districts. States then provide school districts with additional revenues to help equalize expenditures per pupil among the districts. Intrastate disparities in such expenditures declined in many states between 1980 and 1987, but substantial differences in spending among districts still remain in most states (see Figure 11).

Over the past 20 years, litigation has been initiated in many states to overturn systems of school financing on the grounds that the systems are inequitable and hence illegal. Litigants have used education clauses in state constitutions and the equal protection clause of the 14th Amendment to the U.S. Constitution as the basis for those actions. In the 1980s, for example, systems of school financing were declared unconstitutional in Arkansas, Kentucky, Montana, New Jersey, and Texas. In 1990, court cases had been filed or were planned in about 25 states.

Federal involvement in this issue has been limited largely to the allocation of Impact Aid,

which under some circumstances can be taken into account in efforts by states to equalize educational resources. The lack of federal concern stems from a 1973 ruling by the U.S. Supreme Court. The court ruled in *Rodriguez v. San Antonio Independent School District* that existing differences in expenditures per pupil among school districts in Texas did not violate the 14th Amendment.

Another perspective on spending for education in the United States can be gained by examining how much other countries spend on education (see Figure 12). The United States invests more to educate its elementary and secondary students than do other major industrialized countries. In the 1988-1989 school year, spending per pupil was higher in the United States than in the former West Germany, Japan, France, the United Kingdom, and Canada. Although other countries allocate a larger fraction of their gross domestic product (GDP) to education, the United States (which has the largest GDP) actually spends more, on average, per student than do other major nations.

Teachers' Salaries and Staffing Patterns

Spending for teachers is probably the largest and most important instructional expense that schools must cover. Two primary ways in which spending on teachers can increase are by paying teachers higher salaries and by hiring more teachers, which would reduce the average number of students in a classroom. The increased spending on public elementary and secondary education that was evident during the 1980s was directed toward both of these elements.

The average salary of full-time teachers, after declining in the late 1970s, increased during the 1980s (see Figure 13). By school year 1990-1991, it was at its highest level ever, about $33,000. At least some of the increase in average salary was attributable to the growing seniority of many teachers; in addition, some could be ascribed to the increasing number of years of education that teachers had, another factor that, along with seniority, determines their salaries. The median years of teaching experience increased from 8 years in 1971 to about 15 years in 1991.

The earnings of teachers relative to all full-time workers also increased during the 1980s. The difference in salaries between teachers and other workers is especially notable when one remembers that most teachers work a 9- or 10-month school year, compared with 12 months for most other workers.

Salaries for beginning teachers are important in attracting a pool of candidates for teaching positions. The average salary for beginning teachers also increased during the 1980s, but not as much as the average salary of all teachers. Although evidence of a general teacher shortage does not exist, school districts report that teachers are hard to find in some areas of specialization (for example, bilingual education).

With average class size continuing to decline in the 1980s, spending for teachers increased as more teachers were hired. The average pupil-teacher ratio dropped in both elementary and secondary schools (to 19.0 students and 14.5 students per teacher, respectively, in school year 1990-1991; see Figure 14). Smaller classes can improve teacher morale, and some evidence shows that this occurred during the 1980s. In addition, some research indicates that smaller class size is related to student achievement, especially in the early elementary school years. But overall reductions in class size as a strategy to improve student achievement have been criticized for not being cost-effective, because large reductions are needed to achieve relatively small gains in proficiency.[8]

The fraction of school personnel who are administrators or support staff--as opposed to teachers--stabilized in the 1980s (see Figure

8. See Allan Odden, "Class Size and Student Achievement. Research-Based Policy Alternatives," *Educational Evaluation and Policy Analysis*, vol. 12 (1990), pp. 213-227.

15). (Administrative and support personnel include school district administrators, principals, guidance counselors, psychological personnel, and various other instructional staff such as curriculum specialists, as well as secretarial and clerical personnel, transportation staff, food service workers, and plant operation and maintenance, health, recreation, and various other staff.) After increasing in the 1960s and 1970s, the share of all school staff who were administrative or support personnel remained at about 47 percent during the 1980s.

The public's increasing concern about the condition of education during the 1980s fostered rising revenues along with various reforms to improve the schools. Total spending rose significantly during the decade, while the average salary of teachers increased and the average number of pupils per teacher declined. As schools received additional resources to carry out their mission, the characteristics of students and their families were also changing.

Characteristics of Students and Their Families

A knowledge of trends in the characteristics of students and their families is essential in assessing changes in student outcomes during the 1980s. Research shows that the qualities of the schools--as opposed to the characteristics of students and their families and other residual factors--can explain only 10 percent to 25 percent of the differences in academic achievement among students. Furthermore, even that share is in part the result of variation in average family backgrounds in different schools, which stems from a myriad of factors.

Changes in the family and social backgrounds of students also form part of the context for reconsidering federal and state policies on education that focus on changing the nature of schools to improve the performance of students. The national education goals, for example, call for the schools to change so that more students master challenging subject matter, improve their achievement in science and mathematics, and graduate from high school. Successful learning, however, requires the efforts of students as well as teachers, and research has identified a range of attributes--demographic, economic, social, and psychological--that affect the success of students in school. The challenge that teachers face to motivate and engage their students in learning is shaped by the characteristics of their students.

The number of students establishes the magnitude of the effort required by the schools. In the fall of 1992, schools enrolled an estimated 47.6 million children in grades K through 12. Enrollment declined in the first half of the 1980s but has been rising since then (see Figure 16). It is projected to increase steadily--in both the elementary and secondary grades--for at least the next 10 years.

The public schools remain the primary educators of children in grades K through 12. Almost 90 percent of all students were enrolled in public schools in the fall of 1990--about the same as in 1980. Relatively more students attend private schools in the elementary grades than in high school.

Factors Associated with Educational Challenges

The fraction of children who had characteristics that are usually associated with being educationally disadvantaged increased in the 1980s. These characteristics include membership in some minority racial or ethnic group, a family whose income falls below the poverty line, limited proficiency in English, a learning disability, and a single-parent family. Each of these attributes is related to relatively poor performance in school--lower test scores and higher dropout rates--although the cause of the association is not always clear.

The racial or ethnic composition of elementary and secondary school enrollment in the United States is undergoing a major change (see Figure 17). The proportion of students who are white declined in the 1980s and is projected to continue to drop at least through the year 2000. In 1980, almost 75 percent of the school-age population was white; that share is expected to decline to about 65 percent in 2000. The trend of growth in the proportions of children who are members of minority groups is especially notable among Hispanics. They made up about 8 percent of school-age children in 1980 but are expected to constitute 14 percent in 2000. The proportion of children who are black is expected to increase slightly to about 15 percent in 2000. The proportion of school-age children of other races--mainly, Asian/Pacific Islanders--is expected to grow from more than 2 percent to almost 6 percent between 1980 and 2000.

Poverty is an important source of the educational disadvantages seen in many black and Hispanic children. For children under 18 years of age, the proportion living in poverty--the poverty rate--fluctuated during the 1980s; it ended at nearly 20 percent overall in 1990, several points higher than in 1980. The poverty rates of black and Hispanic children are significantly higher than that of white children (see Figure 18). In 1990, about 15 percent of white children were living in poverty, compared with about 44 percent of black children and 40 percent of Hispanic children.

Some analysts believe that the concentration of black and Hispanic students in predominantly minority schools may affect their performance because some research has found that the quality of such schools is lower than that of predominantly white schools in some areas.[9] The proportion of black and Hispanic students attending predominantly minority schools increased in the 1980s in those parts of the country for which data are available (see Figure 19). Enrollment of blacks in predominantly minority schools declined between the 1968-1969 school year and the 1976-1977 school year but has increased since then. Enrollment of Hispanic students in predominantly minority schools, in contrast, has been increasing steadily since school year 1968-1969 as their proportion in the population has increased.

Speaking a language other than English at home is also a factor associated with relatively lower levels of performance in school. The number of students ages 8 to 15 who speak a language other than English at home increased by more than 860,000 between 1979 and 1989, rising from about 8 percent to 12 percent of students this age. Moreover, children who speak Spanish at home--about two-thirds of the children who speak a language other than English at home--are more likely than children who speak other languages at home to be below the typical (modal) grade for their age. Language differences associated with recency of immigration could help to explain why Hispanic students made less progress than black students in closing the achievement gap with white students during the 1980s.

The proportion of students in public elementary and secondary schools who are classified as having a learning disability also increased between 1977 and 1989 (see Figure 20). The increasing number and proportion of disabled students have a significant effect on school budgets, because educating students with disabilities costs more than educating students in regular programs--on average, 2.3 times what was spent for regular students in the 1985-1986 school year.[10] Youths with disabilities

9. See Marshall S. Smith and Jennifer O'Day, "Educational Equality: 1966 and Now," in Deborah A. Verstegen and James Gordon Ward, eds., *The 1990 American Education Finance Association Yearbook. Spheres of Justice in Education* (New York: Harper Collins Publishers, 1991); David J. Armor, "Why is Black Educational Achievement Rising?" *The Public Interest* (Summer 1992), pp. 65-80.

10. For more details, see Mary T. Moore, E. William Strang, Myron Schwartz, and Mark Braddock, *Patterns in Special Education Service Delivery and Cost* (Washington, D.C.: Decision Resources Corporation, December 1988)

are more likely than those without them to be male, black, and poor.

Disagreement exists about whether the incidence of learning disabilities among children is actually growing or whether schools today are more likely than they were in past years to classify children as learning disabled. In fact, the growth in the proportion of children classified as learning disabled has coincided with declines in the proportions identified as having other major disabilities (speech impairments, mental retardation, and serious emotional disturbances), although the proportion of all children determined to be disabled has grown. In any case, children who are classified as having a learning disability must be served in federally supported programs of special education.

The proportion of children who live with two parents continued its decline in the 1980s (see Figure 21). Over that decade, the drop in the proportion of children under 18 years of age living with two parents was greatest among Hispanics. But by 1990, only 38 percent of black children lived with both parents, compared with 67 percent of Hispanic children and 79 percent of white children Among children living with one parent (generally their mother), the fraction whose parent had never been married also increased significantly between 1980 and 1990, rising from 7 percent to 19 percent among whites, from 29 percent to 52 percent among blacks, and from 20 percent to 33 percent among Hispanics.

Factors Associated with Educational Improvement

Several trends that are believed to be associated with better performance of students were also evident in the 1980s. Children who attend preschool may be better prepared for kindergarten and do better throughout their schooling than children who do not, and during the 1980s, the number of children attending such classes grew (see Figure 22). The proportion of students who had preprimary education increased most among three- to four-year-old whites, but participation among black children of the same age also grew. In contrast, among Hispanic children, preschool enrollment remained at a lower rate.

Disadvantaged children, however, are less likely to receive preschool instruction than are children from higher-income families. For example, in 1990, about 59 percent of three- to four-year-olds from families with incomes of $40,000 or more were enrolled in preschool programs (excluding kindergarten), compared with 30 percent of similar children from families with less than $20,000 in income. Part of the reason families with higher incomes are more likely than those with lower incomes to enroll their children in preschool programs is that the parents are more likely to be employed.

A strong relationship exists between the level of education of parents and the academic achievement of their children. During the 1980s, the proportion of both elementary and high school students whose family head had at least completed high school rose (see Figure 23). In 1980, about 69 percent of students in grades 9 through 12 lived in a household in which the head had at least a high school education; by 1990, this figure had risen to 80 percent. The largest gains were among blacks, for whom the percentage rose from 45 percent to 68 percent over the decade. As a result, the gap between black and white students in the proportion whose family head had at least a high school education dropped from 27 percentage points in 1980 to about 13 percentage points in 1987 before edging up to 14 percentage points in 1990. Among Hispanic students in grades 9 through 12, the proportion with a family head who had completed at least high school rose from 34 percent to 46 percent between 1980 and 1990. This increase also produced a slight drop in the difference between the fractions of white and Hispanic students whose household head had a high school diploma.

Students' use of illegal drugs also dropped in the 1980s (see Figure 24). The proportion of

high school seniors who reported ever using an illegal drug--including marijuana, cocaine, and other opiates and stimulants but not alcohol--peaked in the early 1980s and then decreased, dropping below levels that were last reached in 1975. Still, in 1991, 44 percent of high school seniors reported having used an illegal drug at least once; about 16 percent reported that they had used the drug in the month before being surveyed. These results suggest that much more effort is necessary to reach the sixth national education goal--that every school be free of drugs--by the year 2000. Notably, a higher proportion of white high school seniors reported using illegal drugs in the past year than did black, Hispanic, and Asian students. Alcohol use also fell during the 1980s but only slightly. In 1991, about 88 percent of all high school seniors reported ever having had an alcoholic drink.

The public is widely concerned about the effectiveness of schools in the country as a whole, but the schools they know best they judge as relatively effective. Thus, most parents apparently do not see their children's schools as failures and in need of major improvement. In 1992, less than 20 percent of the population awarded a grade of A or B to the nation's public schools, but at the same time, 64 percent of parents with children in a public school gave their child's school a grade of A or B (see Figure 25). When respondents were asked about the schools in their larger community, about 40 percent of them gave those schools an A or B.

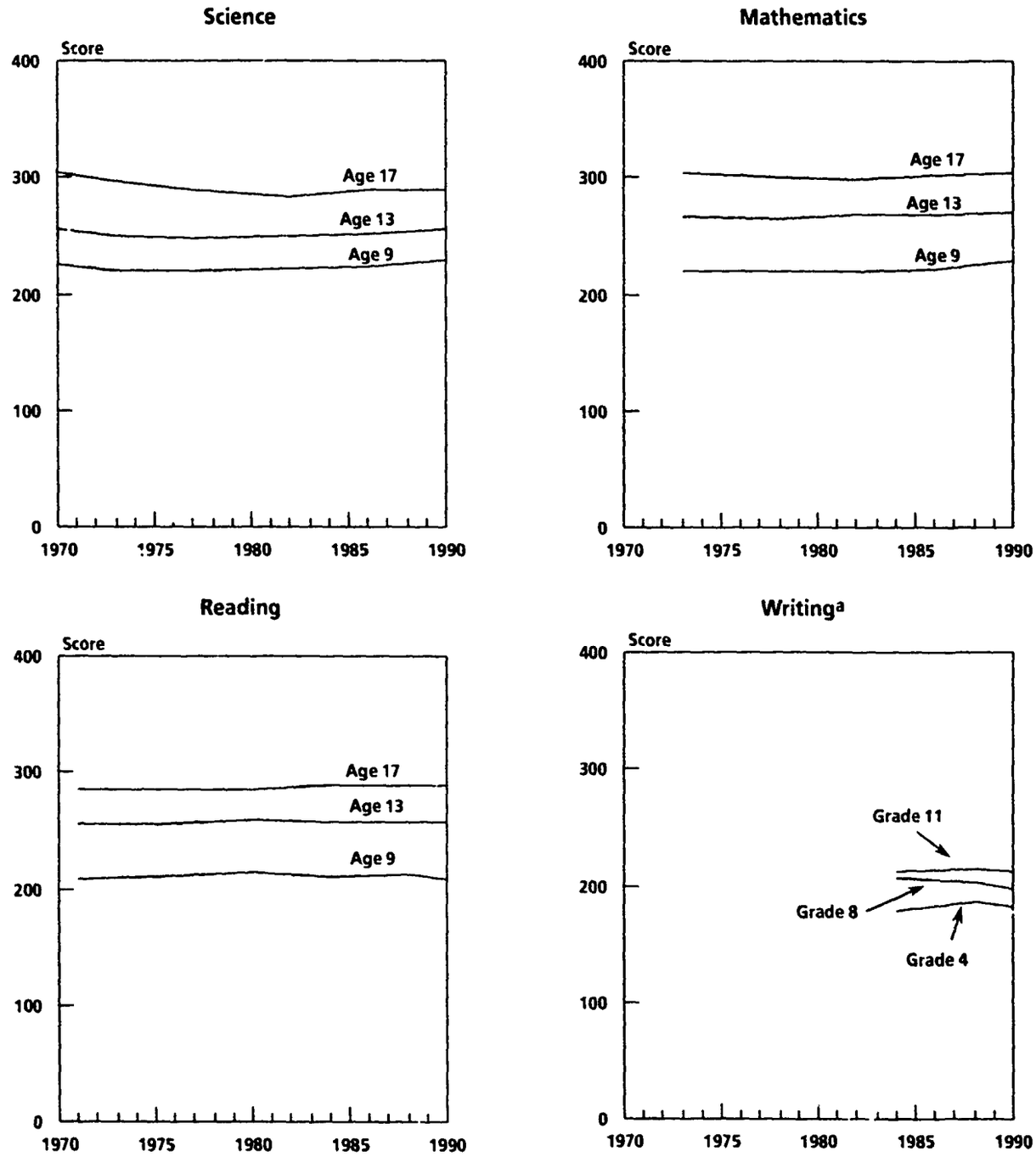
The Effectiveness of Schools and the National Education Goals

Any assessment of how well students and their schools have been doing depends on the standard of effectiveness being used as a criterion. Historical trends indicate that the performance of students has been basically stable (as measured by test scores) or improving slightly (as measured by graduation rates) during the past 20 years. Minority students, however, have made significant strides in closing the gap that has existed between their performance and that of white students. Yet a contrasting picture emerges with the use of the standards of proficiency recently developed by the National Assessment Governing Board. Assessing the performance of students against those standards reveals that about 80 percent of elementary and secondary students appear to have failed to become proficient in challenging mathematical subject matter appropriate for their grade level. Moreover, international comparisons in mathematics and science (though not in reading) repeatedly show that students in the United States fare poorly compared with students in other nations.

The national education goals imply that, whatever the current level of accomplishment of U.S. students, substantial progress can and must be made before they (and adults in this country) have the knowledge, attitudes, and skills they need for the future. The challenge posed by the national education goals is where to go next. Part of that decision involves what the federal role should be in improving the large and complex U.S. education system--a system that encompasses 50 states, the District of Columbia, and a number of outlying areas.

In making decisions concerning possible changes in the federal role, the Congress will face several basic questions concerning federal priorities and the extent of federal control over education in this country. These issues form a framework for the options that the Congress may wish to consider in reauthorizing the various acts that provide federal support for elementary and secondary education.

Figure 1.
Trends in Student Achievement in Science, Mathematics, Reading, and Writing, Based on the National Assessment of Educational Progress

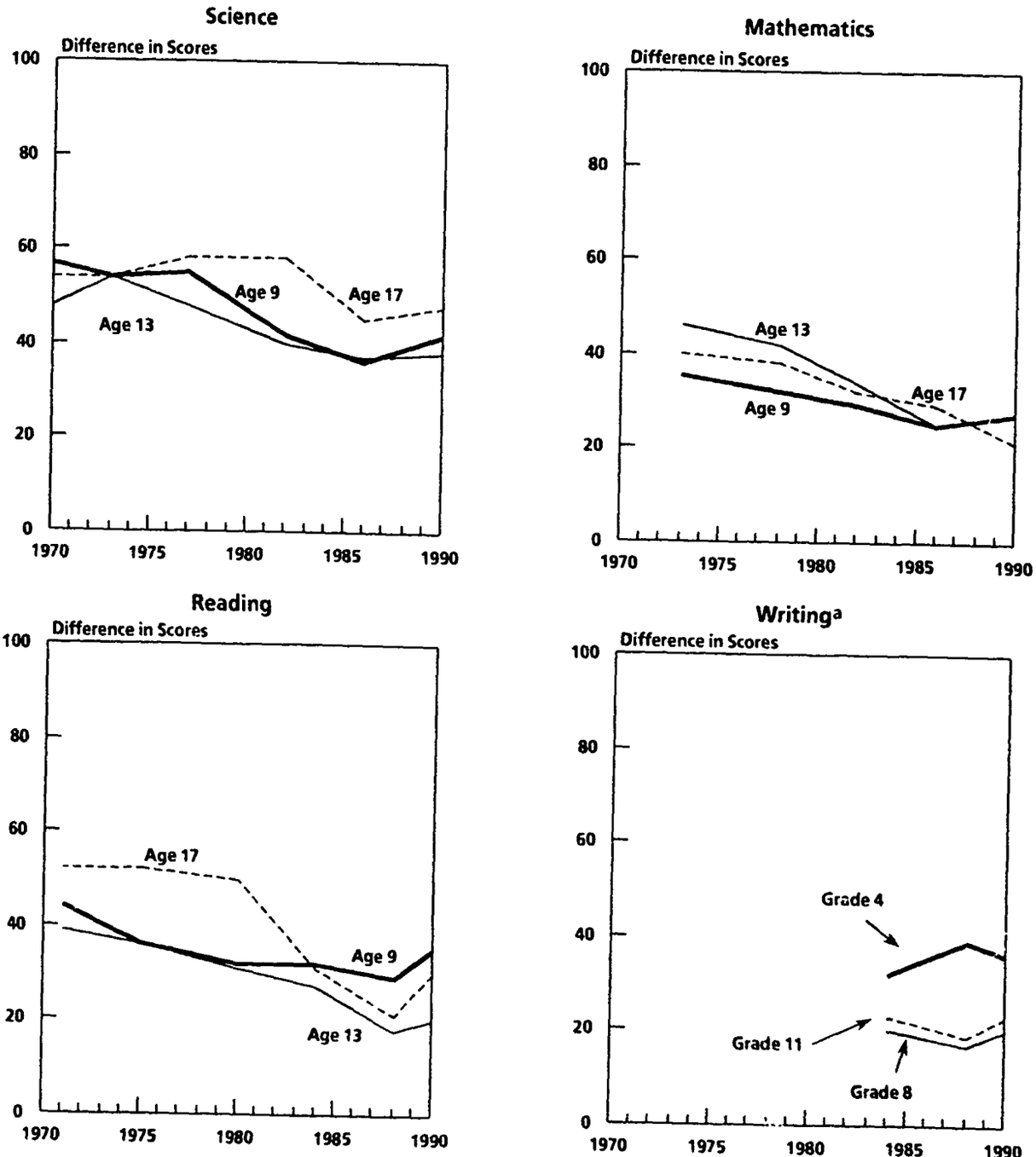


SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE: The National Assessment of Educational Progress was conducted in the following years. science--1977, 1982, 1986, and 1990 (scores for the years 1970 [1969 for 17-year-olds] and 1973 were extrapolated); mathematics--1978, 1982, 1986, and 1990 (scores for 1973 were extrapolated); reading--1971, 1975, 1980, 1984, 1988, and 1990; and writing--1984, 1988, and 1990 Data for the years between assessments (or extrapolations) were interpolated.

a. Writing proficiency was assessed among fourth, eighth, and eleventh graders, regardless of their ages.

Figure 2.
Trends in the Difference Between the Test Scores of White and Black Students, Based on the National Assessment of Educational Progress

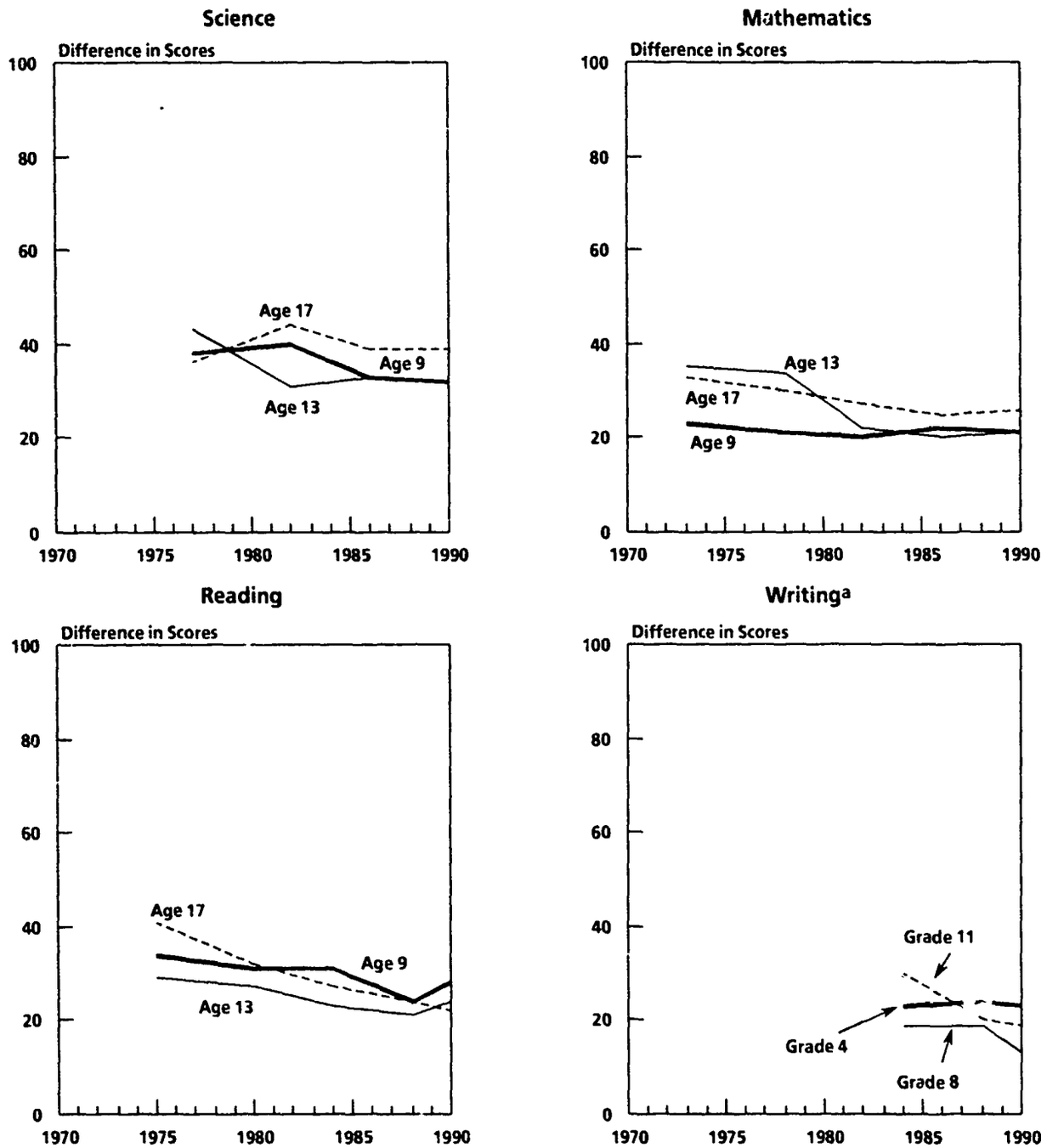


SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE: "Difference in scores" was calculated by subtracting the score of black students from the score of white students. The National Assessment of Educational Progress was conducted in the following years: science--1977, 1982, 1986, and 1990 (scores for the years 1970 [1969 for 17-year-olds] and 1973 were extrapolated); mathematics--1978, 1982, 1986, and 1990 (scores for 1973 were extrapolated); reading--1971, 1975, 1980, 1984, 1988, and 1990; and writing--1984, 1988, and 1990. Data for the years between assessments (or extrapolations) were interpolated.

a. Writing proficiency was assessed among fourth, eighth, and eleventh graders, regardless of their ages.

Figure 3.
Trends in the Difference Between the Test Scores of White and Hispanic Students, Based on the National Assessment of Educational Progress

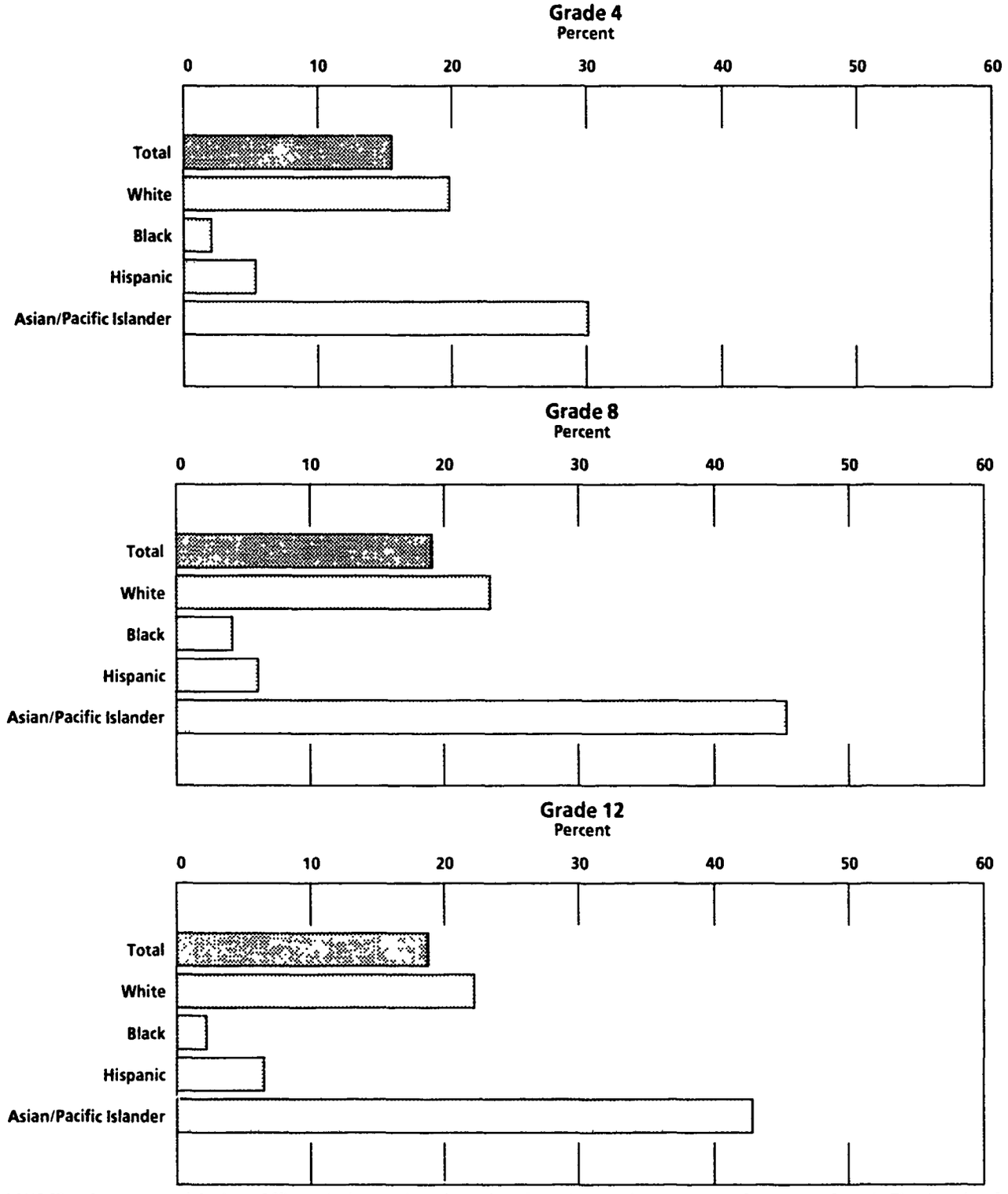


SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992)

NOTE: "Difference in scores" was calculated by subtracting the score of Hispanic students from the score of white students. The National Assessment of Educational Progress was conducted in the following years. science--1977, 1982, 1986, and 1990 (scores for the years 1970 [1969 for 17-year-olds] and 1973 were extrapolated); mathematics--1978, 1982, 1986, and 1990 (scores for 1973 were extrapolated); reading--1971, 1975, 1980, 1984, 1988, and 1990, and writing--1984, 1988, and 1990. Data for the years between assessments (or extrapolations) were interpolated.

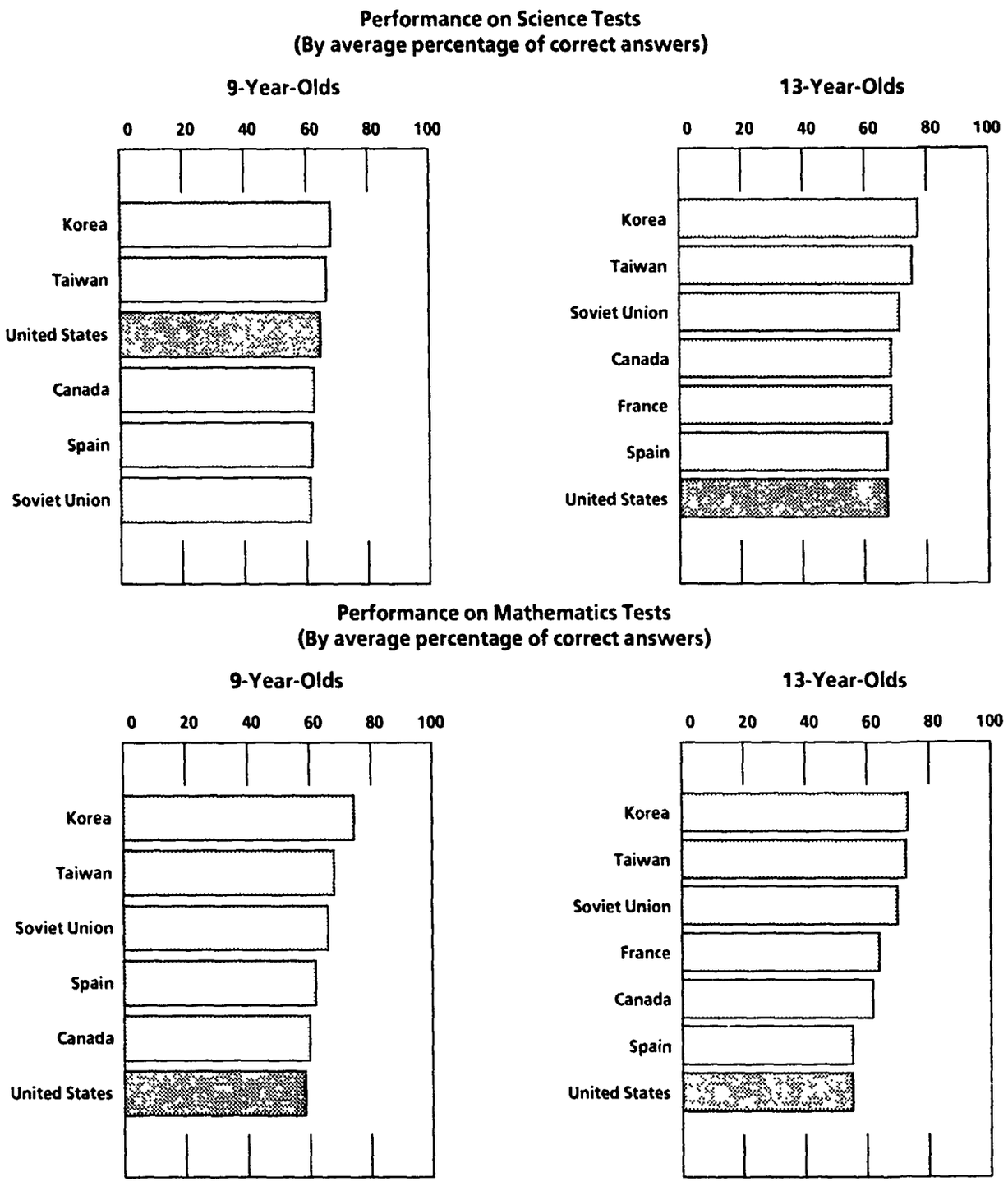
a. Writing proficiency was assessed among fourth, eighth, and eleventh graders, regardless of their ages.

Figure 4.
Percentage of Students Achieving Proficiency in Mathematics, Based on the 1990 National Assessment of Educational Progress, by Grade and Race or Ethnicity



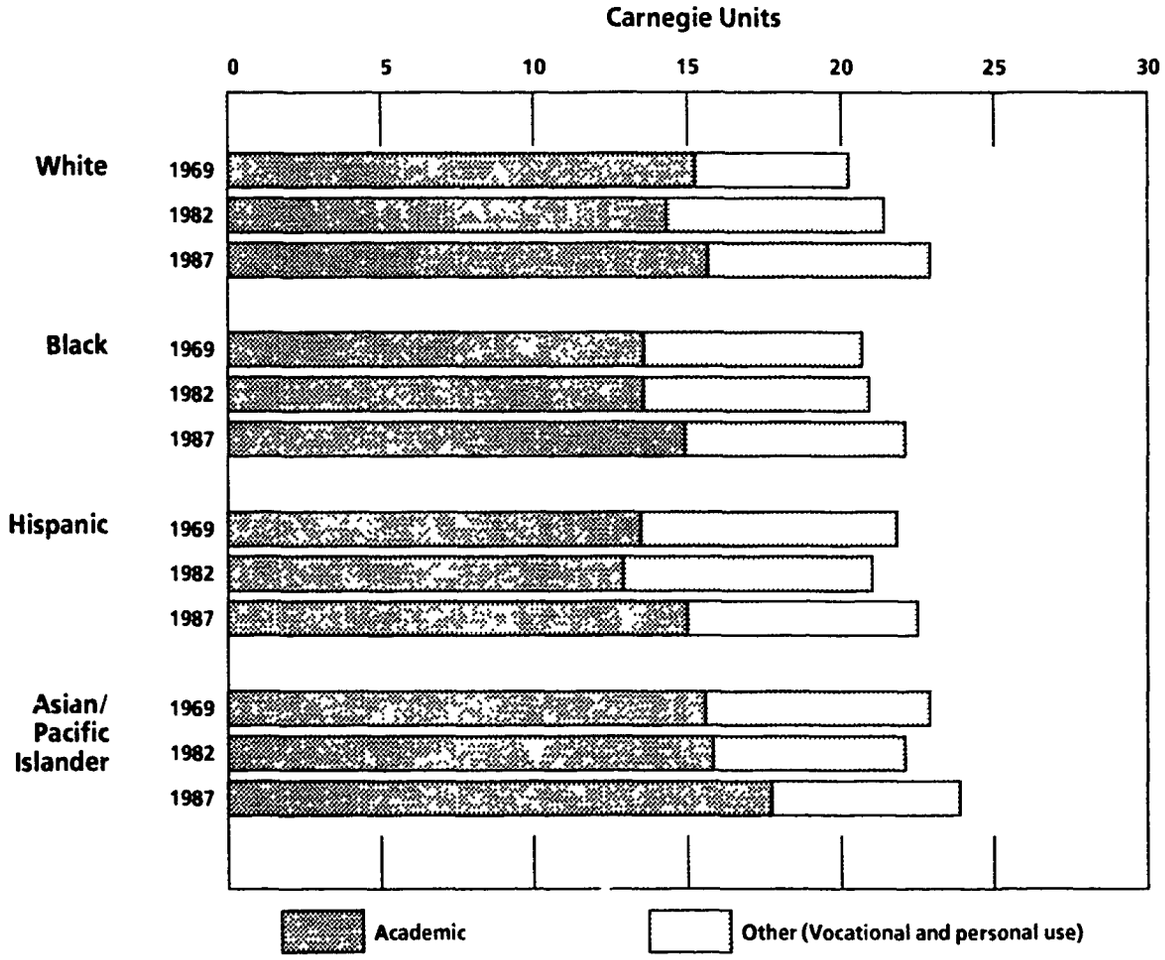
SOURCE: Congressional Budget Office calculations based on data from National Assessment Governing Board, *The Levels of Mathematics Achievement. Initial Performance Standards for the 1990 NAEP Mathematics Assessment*, vol. 1 (Washington, D.C.: Government Printing Office, September 30, 1991).

Figure 5.
International Comparisons of Performance by 9- and 13-Year-Olds in Science and Mathematics, Based on the Second International Assessment of Educational Progress, 1991



SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

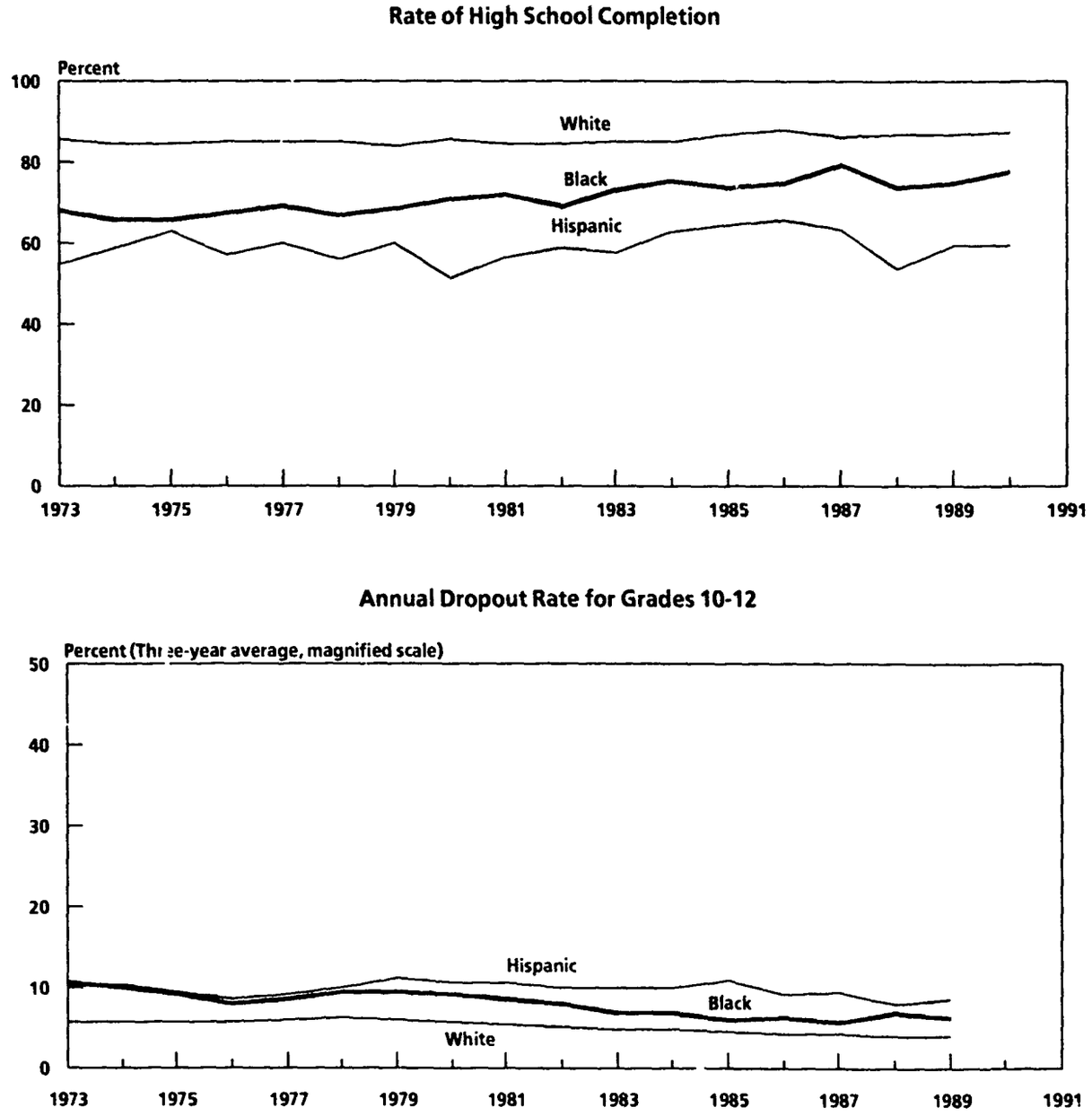
Figure 6.
Number of Courses Taken by High School Graduates, 1969, 1982, and 1987



SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE: The number of courses is measured in Carnegie units, which assign one credit for the completion of a one-hour, one-year course.

Figure 7.
High School Completion and Dropout Rates, October 1973-October 1990



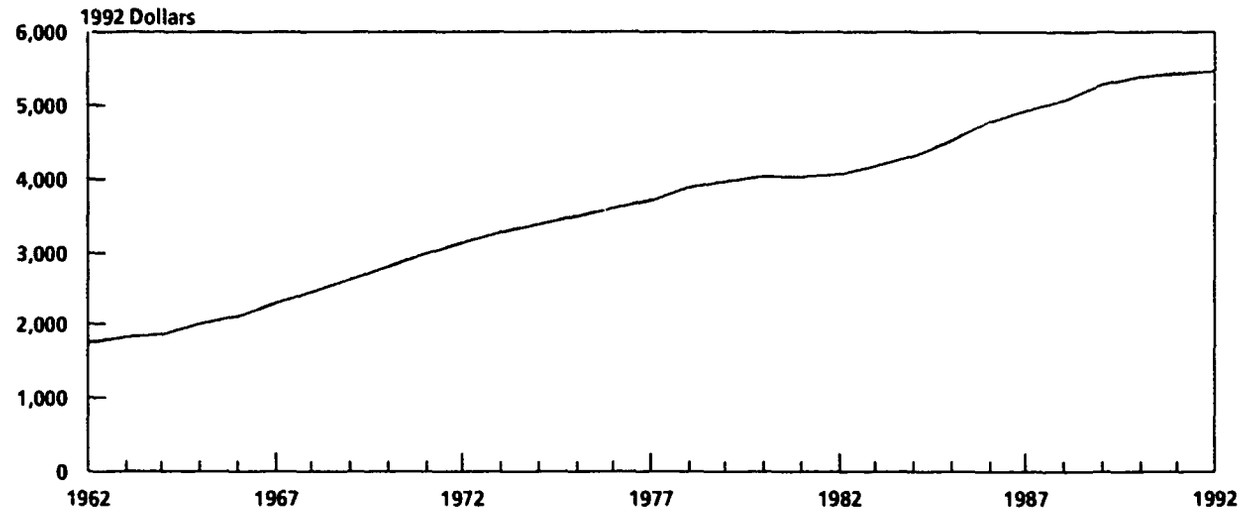
SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992), and Bureau of the Census, "School Enrollment--Social and Economic Characteristics of Students: October 1990," *Current Population Reports*, series P-20, no. 460 (April 1992)

NOTES: High school completion rates measure the proportion of people who are 19 or 20 years old who have completed 12 or more years of school.

The annual dropout rate is the proportion of students who drop out of school in a single year. Three-year averages are used for reporting annual dropout rates to remove wide yearly fluctuations in race-specific data based on small samples For example, the three-year percentage for 1989 is the average of percentages for 1988, 1989, and 1990

People of Hispanic origin may be of any race

Figure 8.
Average Expenditure per Pupil in Public Elementary and Secondary Schools, School Years Ending 1962-1992

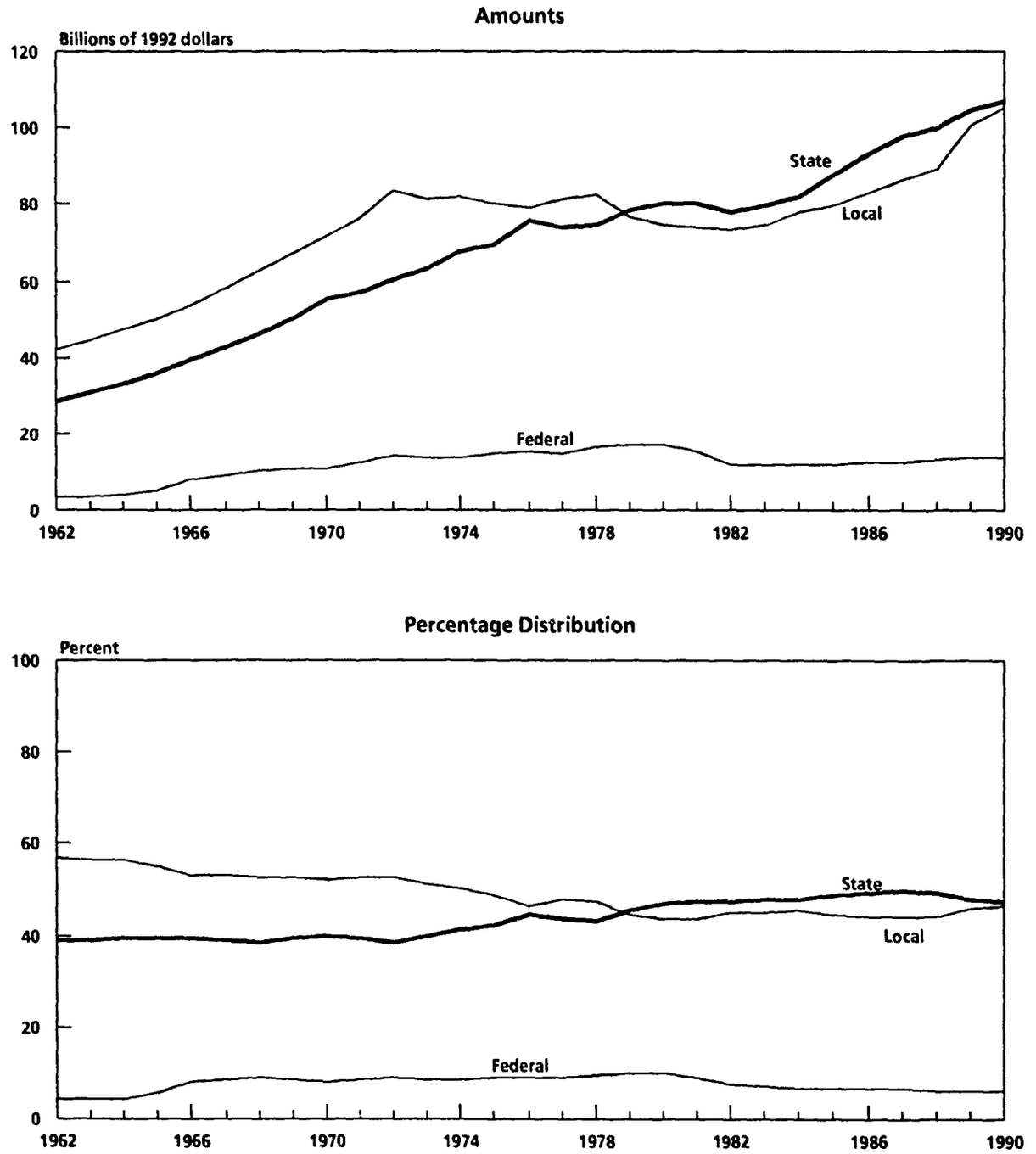


SOURCE. Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1992* (1992).

NOTES: The number of pupils is measured in terms of average daily attendance.

Expenditures are adjusted to 1992 dollars using the consumer price index for all urban consumers. Data are interpolated for the years with missing values.

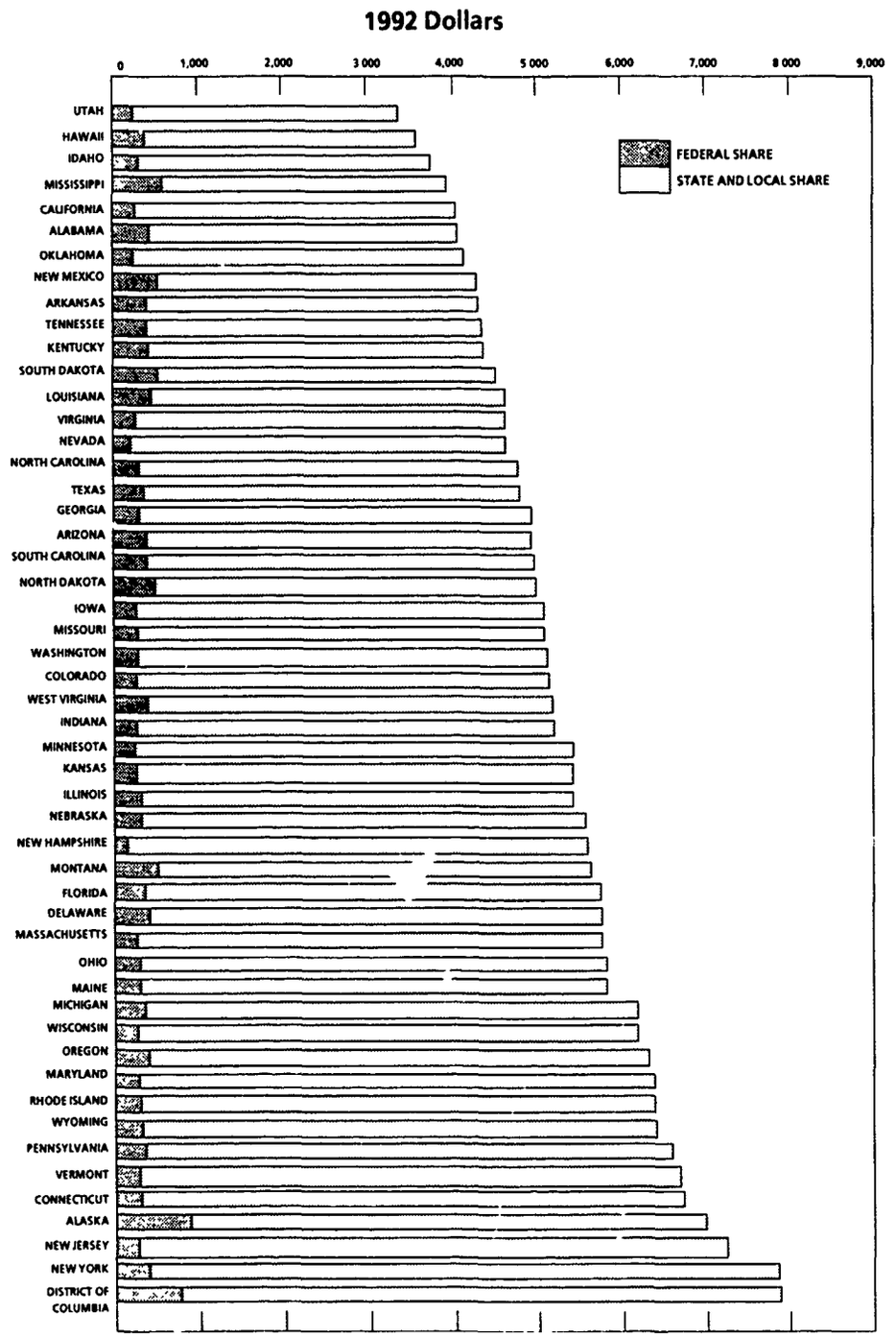
Figure 9.
Source of Funds for Public Elementary and Secondary Schools, School Years Ending 1962-1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1992* (1992).

NOTE. Amounts are adjusted to 1992 dollars using the consumer price index for all urban consumers. Data are interpolated for years with missing values.

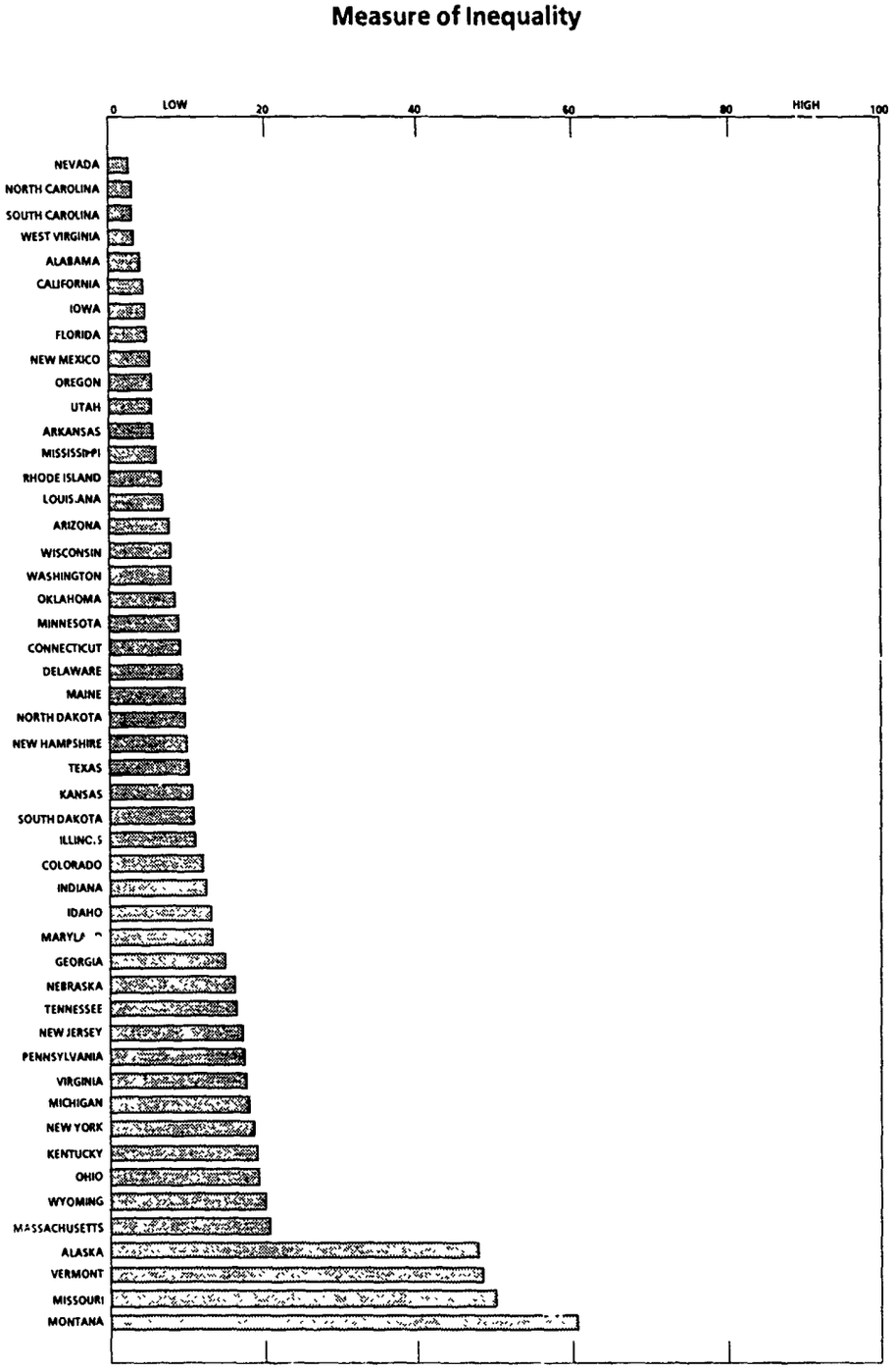
Figure 10.
Average Expenditure per Pupil in Public Elementary and Secondary Schools, by State, School Year 1989-1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1992* (1992)

NOTE. The number of pupils is measured in terms of average daily attendance Expenditures per pupil are adjusted for differences among the states in the cost of living, see Center for the Study of Educational Finance, "Geographical Cost of Living Differences" (Illinois State University, Normal, Ill., April 1991). Expenditures are adjusted to 1992 dollars using the consumer price index for all urban consumers

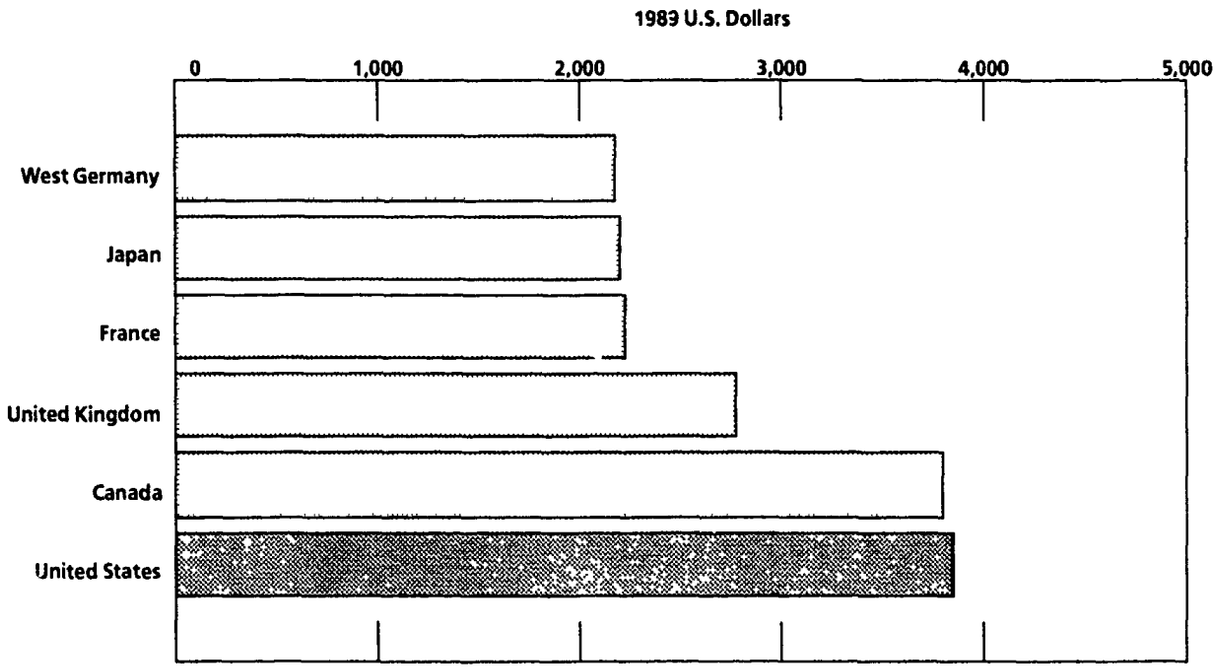
Figure 11.
Inequality in Expenditures per Pupil for Public Education Within States, School Year 1986-1987



SOURCE: Congressional Budget Office using data from James H. Wyckoff, "The Intrastate Equality of Public Primary and Secondary Education Resources in the U.S., 1980-1987," *Economics of Education Review*, vol. 11 (1992), pp. 19-30

NOTE: Inequality is measured by the Theil coefficient using current instructional expenditures per pupil. This measure assesses the difference in expenditures per pupil among school districts within each state. Hawaii and the District of Columbia are not included because both have only a single school district.

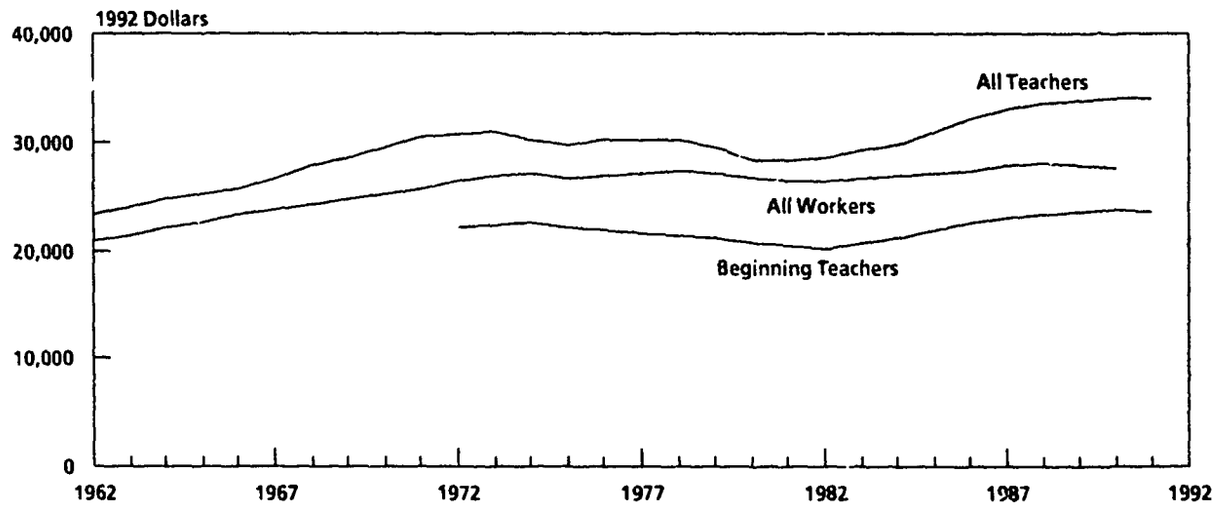
Figure 12.
International Comparisons of Public Expenditures per Pupil for Elementary and Secondary Education, School Year 1988-1989



SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE: Indexes of purchasing power parity were used to convert other currencies to U.S dollars

Figure 13.
Average Salaries of All and Beginning Teachers in Public Schools and Average Salary of All Workers, School Years Ending 1962-1991



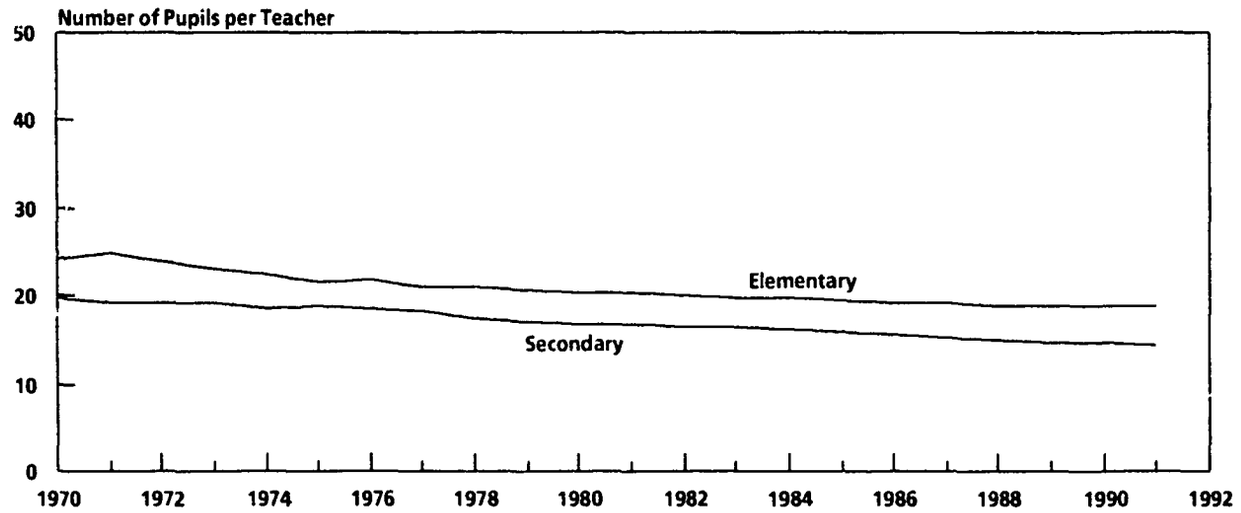
SOURCE. Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1992* (1992), and American Federation of Teachers, "Survey and Analysis of Salary Trends 1990" (Washington, D.C., September 1991).

NOTES. Expenditures are adjusted to 1992 dollars using the consumer price index for all urban consumers.

Data are interpolated for the years with missing values. Data on salaries for beginning teachers are available only for 1972 and later.

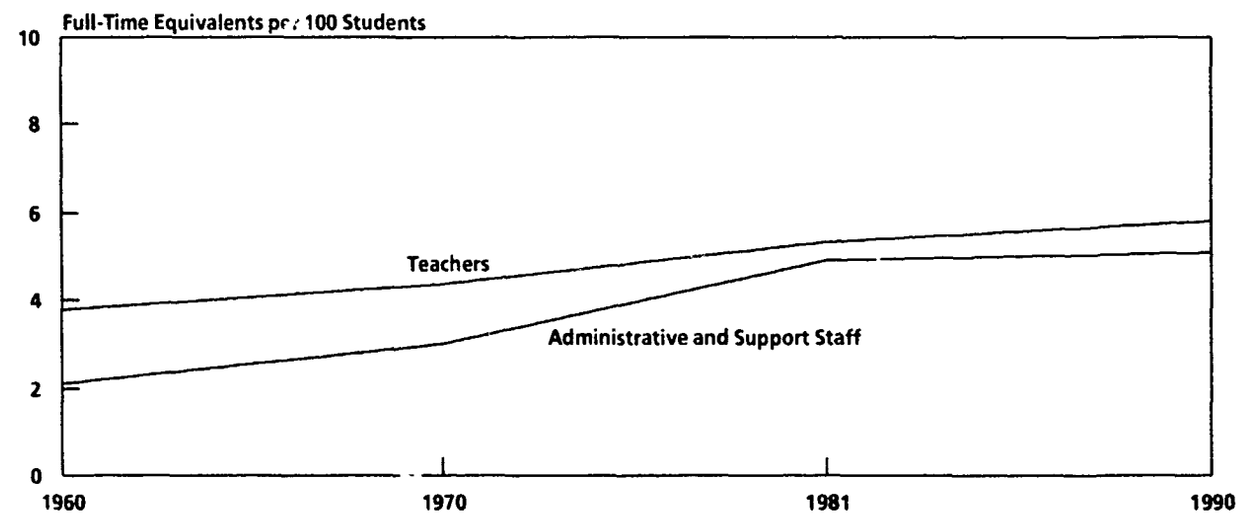
Average salary, which is based on data from the Department of Commerce, equals the average annual earnings of all full-time employees working for wages or a salary in all industries.

Figure 14.
Pupil-to-Teacher Ratio in Public Elementary and Secondary Schools, Fall 1970-Fall 1991



SOURCE Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1992* (1992).

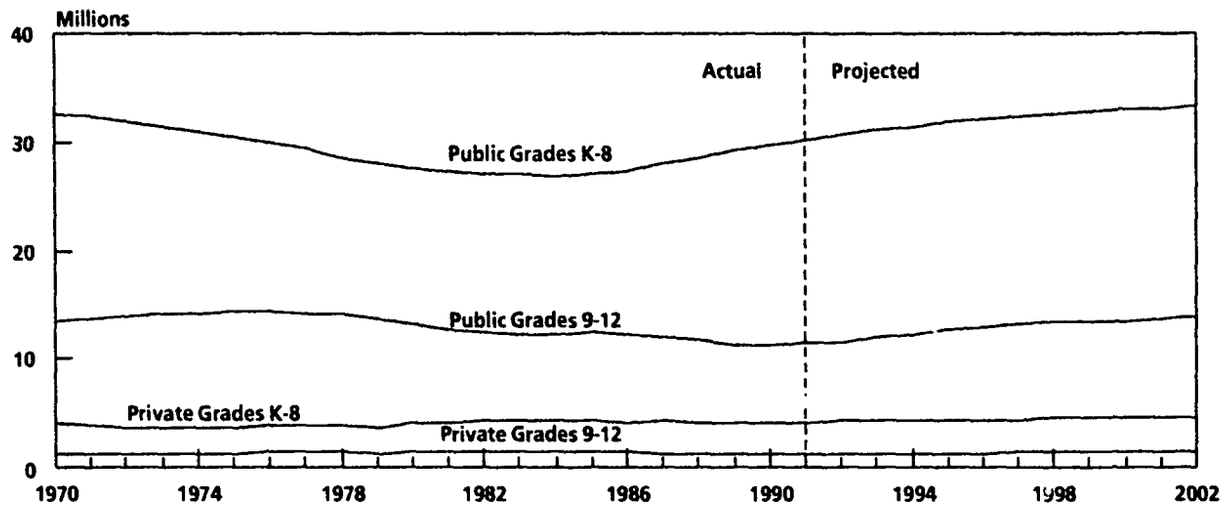
Figure 15.
Teachers and Administrative and Support Staff in Public Schools, School Years Ending 1960, 1970, 1981, and 1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE Administrative and support staff include principals, assistant principals, district administrators, librarians, guidance counselors, janitorial and clerical workers, and others.

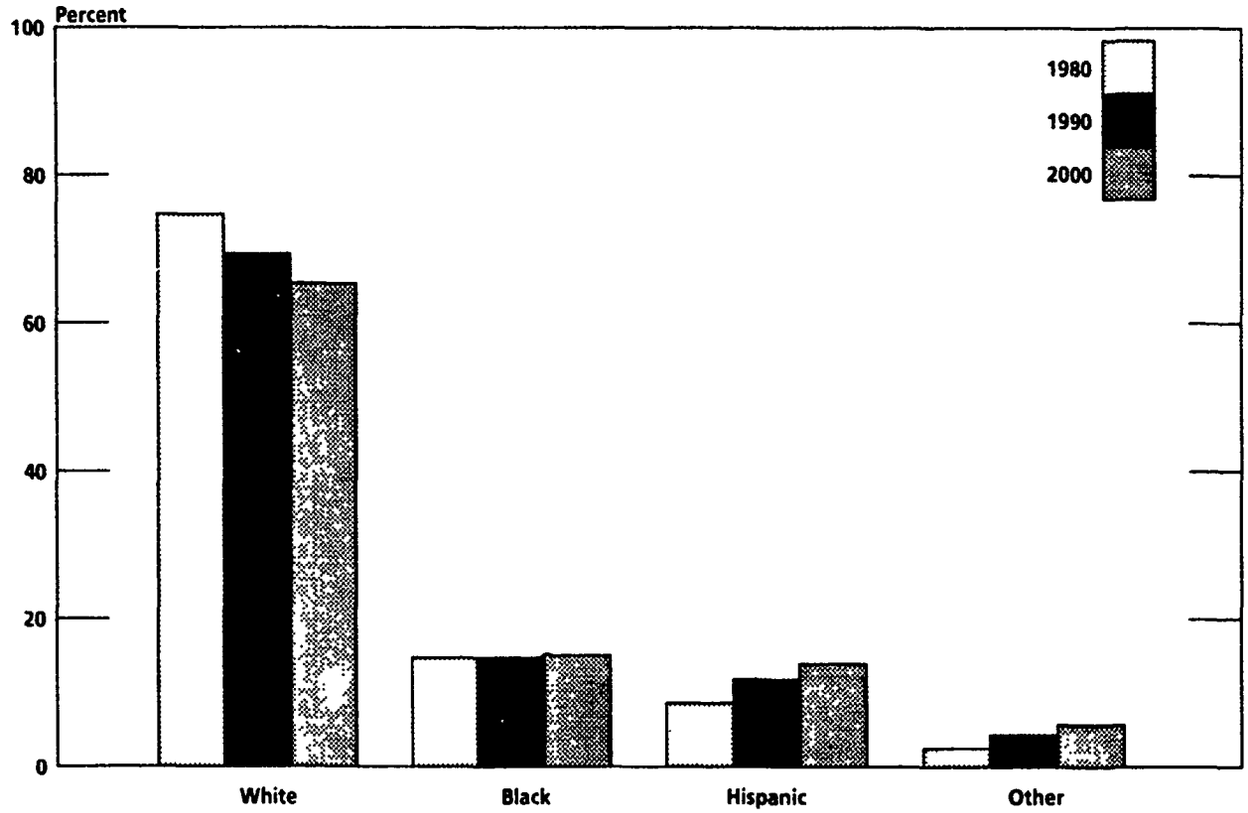
Figure 16.
Enrollment in Grades K-8 and 9-12 of Public and Private Elementary and Secondary Schools, Fall 1970-Fall 2002



SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE: All enrollments are estimated for 1990 and projected for later years.

Figure 17.
Trends in the Composition of the U.S. Population Ages 6 to 17, by Race or Ethnicity, 1980, 1990, and 2000

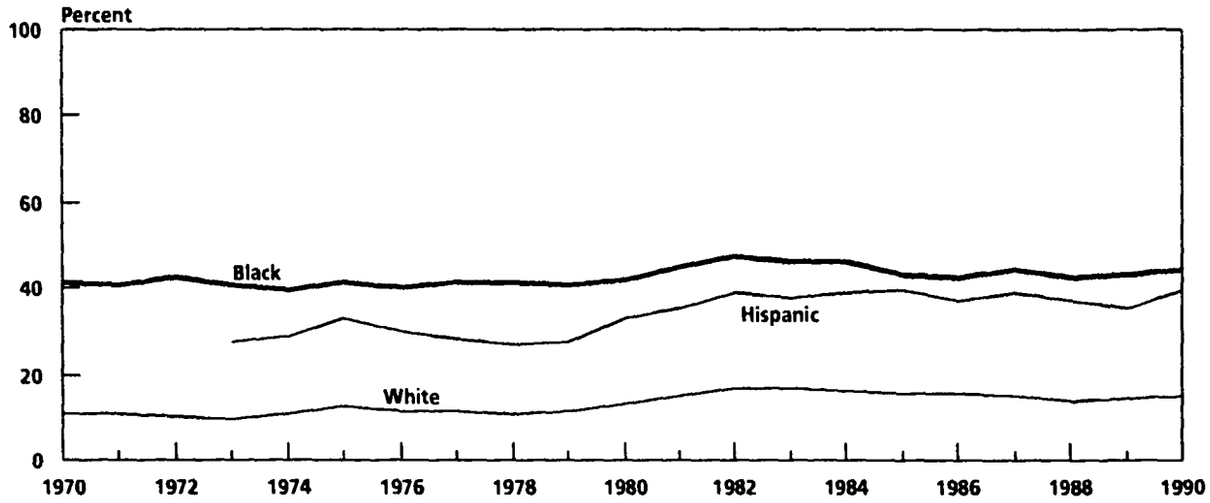


SOURCE: Congressional Budget Office calculations based on data from Bureau of the Census, "U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991," *Current Population Reports*, series P-25, no. 1095 (February 1993), and "Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1992 to 2050," *Current Population Reports*, series P-25, no. 1092 (October 1992).

NOTES: Data for 2000 are projections.

People of Hispanic origin may be of any race.

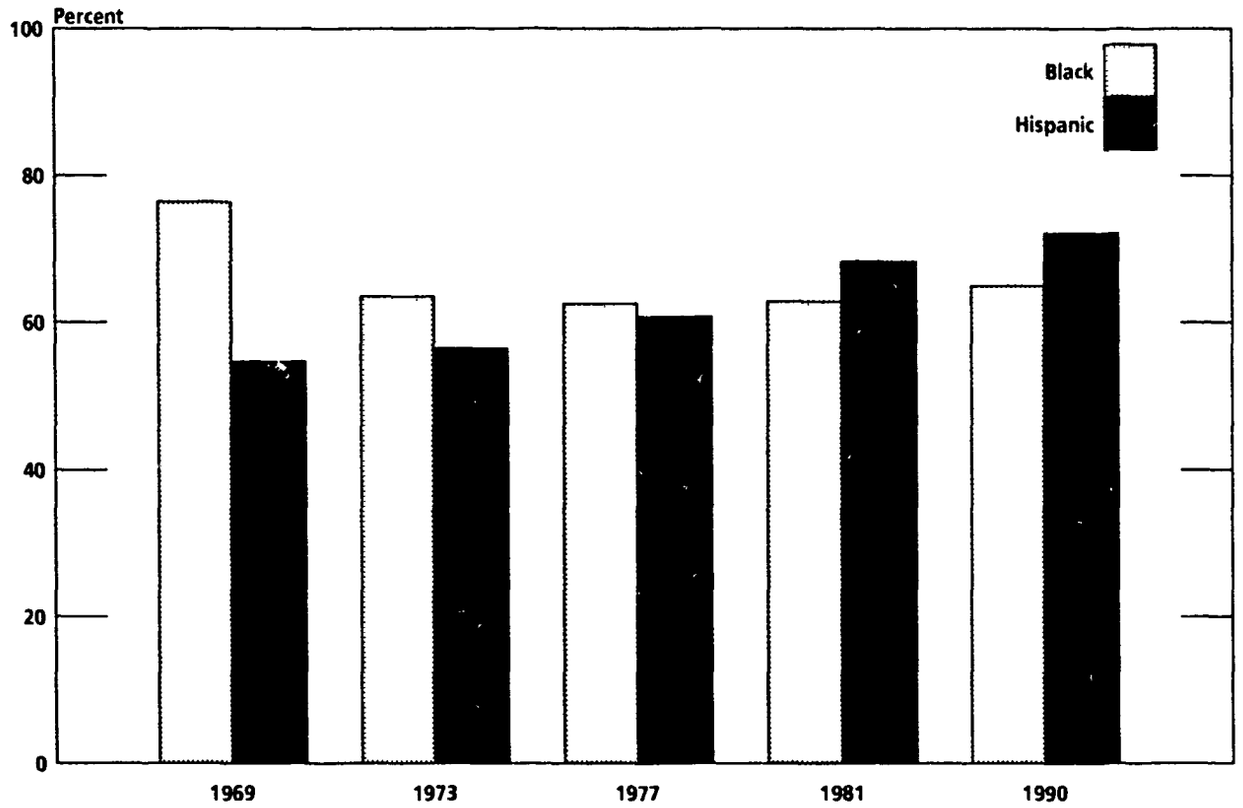
Figure 18.
Percentage of Children Who Live Below the Poverty Level, by Race or Ethnicity, 1970-1990



SOURCE: Congressional Budget Office using data from Bureau of the Census, *Statistical Abstract of the United States, 1992* (1992).

NOTES: These data cover only related children under 18 years of age in families. Data for children of Hispanic origin, who may be of any race, are available only for 1973 and later.

Figure 19.
Percentage of Black and Hispanic Students Attending Predominantly Minority Schools, Selected School Years Ending 1969-1990

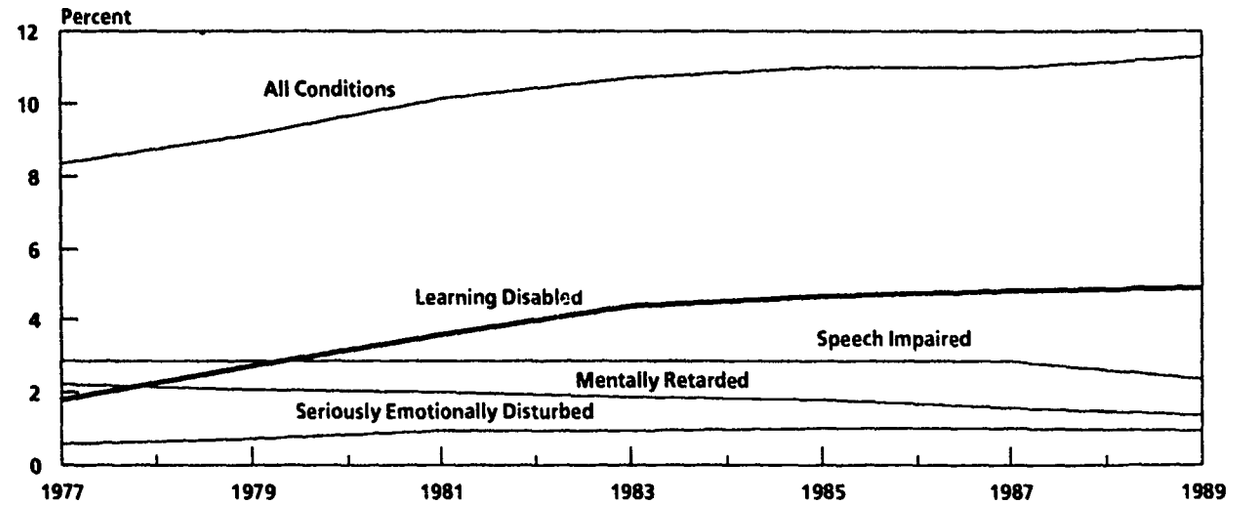


SOURCE: Congressional Budget Office using data from M A. Boozer, A B Krueger, and S. Wolkon, "Race and School Quality Since Brown v. Board of Education," *Brookings Papers on Economic Activity--Microeconomics* (1992), pp 269-338

NOTES: Predominantly minority means that more than half of the students in the school are nonwhite or Hispanic.

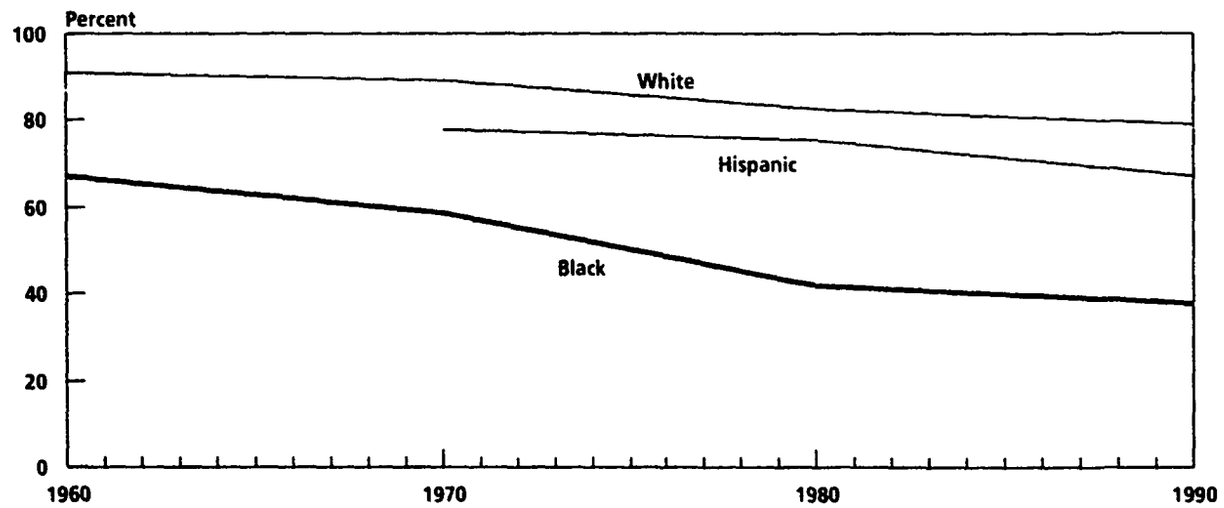
Data for Alaska, Georgia, Hawaii, Idaho, Maine, Missouri, South Dakota, Virginia, and Wyoming are not included.

Figure 20.
Enrollment of Disabled Students in Federally Supported Programs as a Percentage of Enrollment in Public Schools, Grades K-12, by Type of Disability, 1977-1989



SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1991*, vol. 1, *Elementary and Secondary Education* (1991).

Figure 21.
Percentage of Children Under Age 18 Living with Two Parents, by Race or Ethnicity, 1960-1990

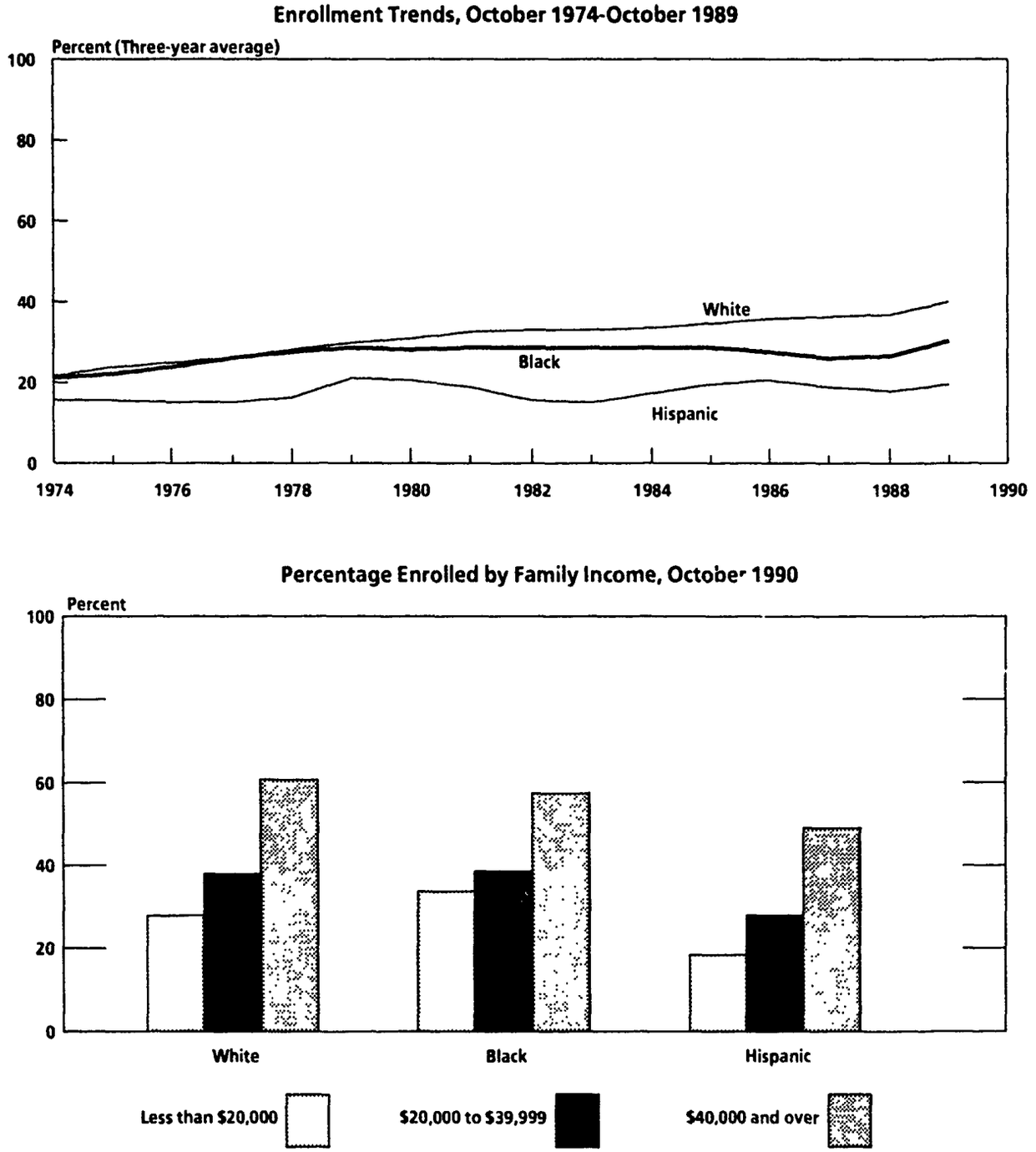


SOURCE: Congressional Budget Office using data from Bureau of the Census, "Marital Status and Living Arrangements," *Current Population Reports*, series P-20, no. 410 (March 1985) and no. 450 (March 1990).

NOTES: From 1960 to 1970, black children include all nonwhite children.

Data for children of Hispanic origin, who may be of any race, are available only for 1970 and later.

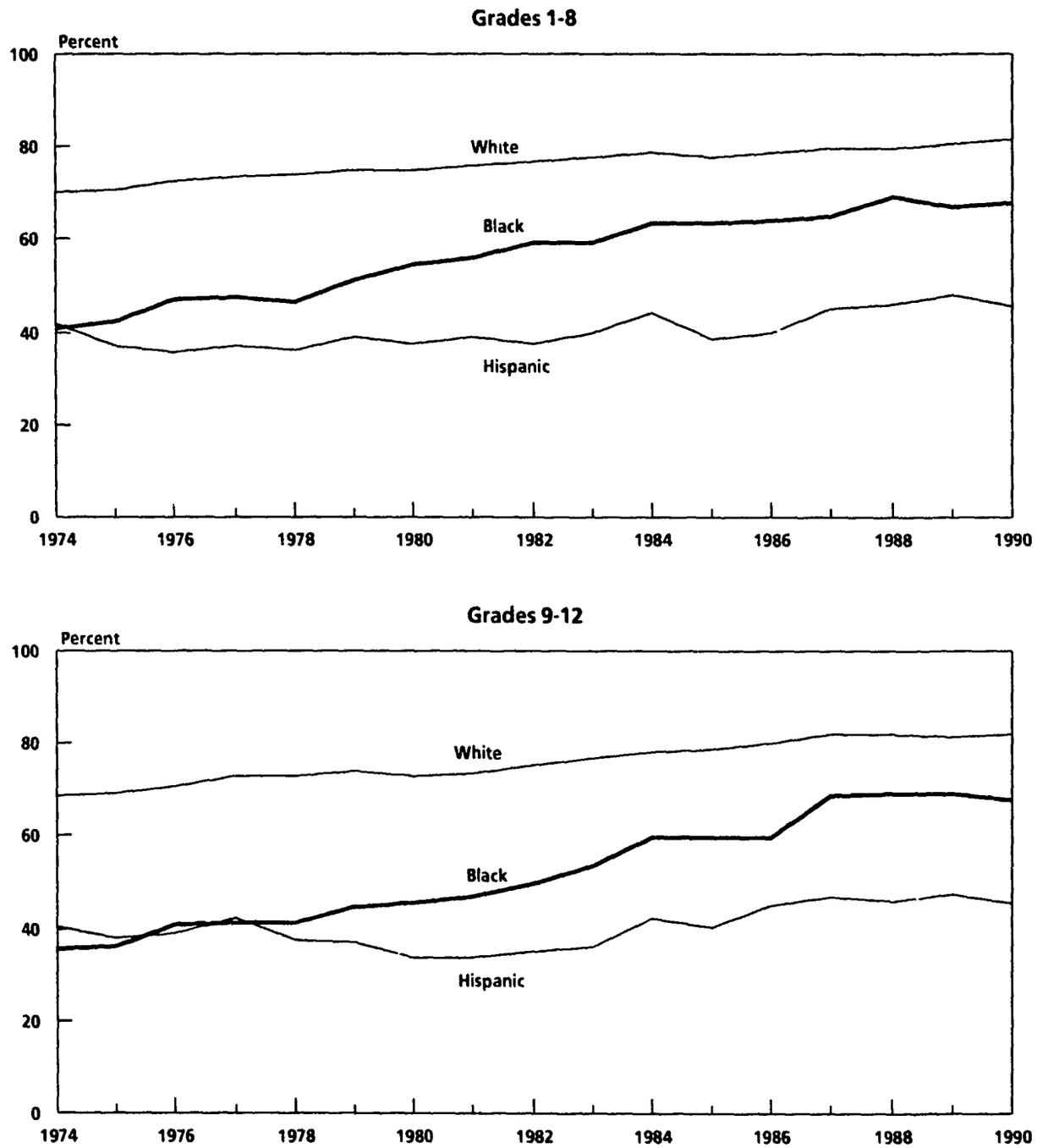
Figure 22.
Preschool Enrollment of 3- and 4-Year-Olds, by Race or Ethnicity and Family Income



SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992), and Bureau of the Census, "School Enrollment--Social and Economic Characteristics of Students: October 1990," *Current Population Reports*, series P-20, no. 460 (April 1992).

NOTE Three-year averages are used to remove wide yearly fluctuations in race-specific data based on small samples. For example, the percentage shown for 1989 is the average of the percentages for 1988, 1989, and 1990. People of Hispanic origin may be of any race

Figure 23.
Percentage of Children Enrolled in Grades 1-8 and 9-12 Whose Family Head Had Completed High School, October 1974-October 1990

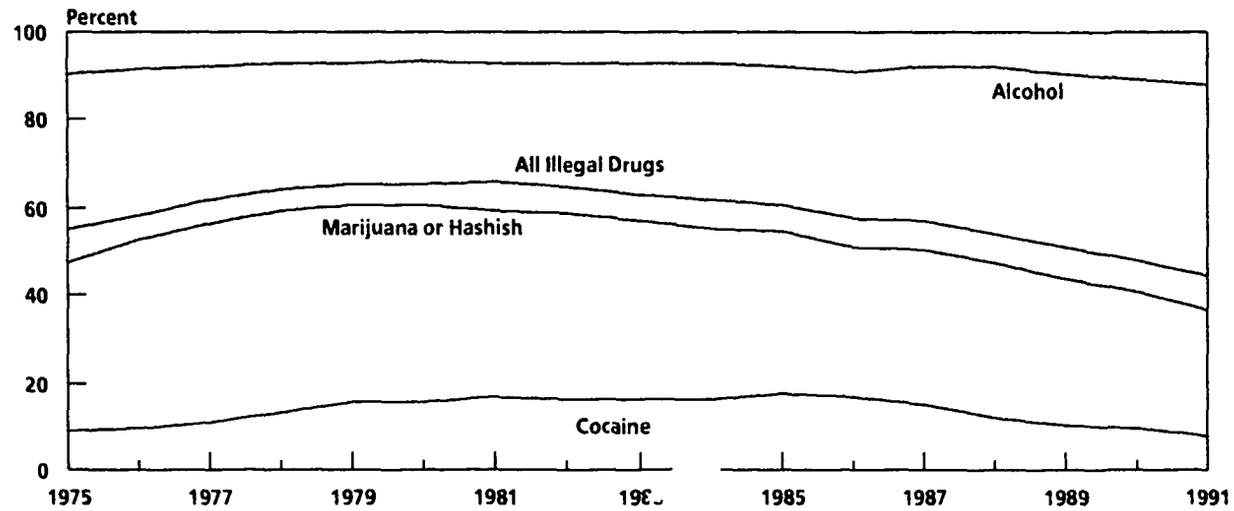


SOURCE: Congressional Budget Office calculations based on data from Bureau of the Census, "School Enrollment--Social and Economic Characteristics of Students," *Current Population Reports*, series P-20 (October 1974-October 1990).

NOTES: From 1974 through 1986, the data cover people aged 3 to 34 enrolled in grades 1 through 12. From 1987 through 1990, the data cover children aged 3 to 17.

People of Hispanic origin may be of any race.

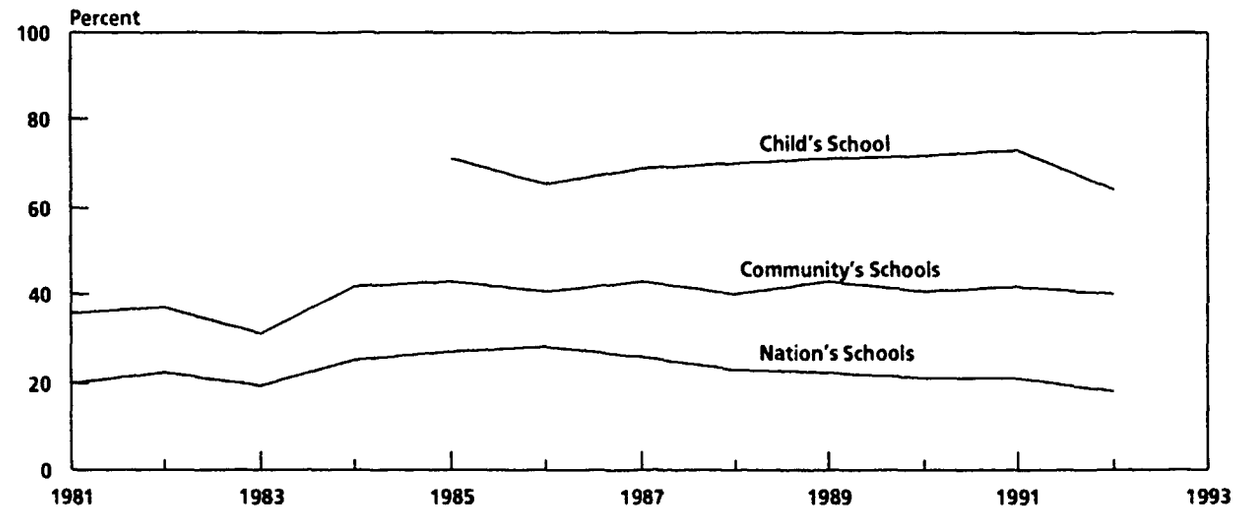
Figure 24.
Percentage of High School Seniors Who Have Ever Used Alcohol or Illegal Drugs, 1975-1991



SOURCE: Congressional Budget Office using data from Department of Education, National Center for Education Statistics, *The Condition of Education, 1992* (1992).

NOTE. The category "All Illegal Drugs" includes marijuana, hallucinogens, cocaine, heroin and other opiates, stimulants, sedatives, barbiturates, methaqualone (excluded since 1990), or tranquilizers not prescribed by a doctor Data for 1982 through 1991 attempt to exclude the inappropriate reporting of nonprescription stimulants

Figure 25.
Percentage of the Public Awarding Grades of A or B to Schools That Their Children Attend, Schools in Their Community, and Schools in the Nation, 1981-1992



SOURCE Congressional Budget Office using data from annual Gallup/Phi Delta Kappa polls.

NOTE. Data on own child's school are available only for 1985 and later

Chapter Three

Shaping the Federal Role in Elementary and Secondary Education

The 103rd Congress faces two fundamental issues regarding the federal role as it considers reauthorizing elementary and secondary education programs. The first is the relative priority to be given to matters of equity for particular groups of students, compared with broader concerns about the excellence of the education provided to all students. The second issue is how active a role the federal government should play in the governance of the U.S. education system, which is largely funded by state and local governments.

Research does not provide sure guidance on these questions, which must be resolved on the basis of philosophical and political considerations. The views of the Congress with respect to these two issues will help to determine and shape the options it adopts. These options could range from enhancing the federal government's role in elementary and secondary education and shifting its focus to educational excellence to reducing the presence of the federal government in education but continuing its concentration on equity.

Although the national economy is recovering from the recession of 1990-1991, the 103rd Congress faces a difficult budgetary situation as it considers reauthorization. Many people believe that it is essential to reduce the federal budget deficit to enhance future economic growth. To do that, tax increases, spending cuts, or a combination of the two would have to be enacted. Other spending priorities, including the expansion of access to health insurance, are also being advocated. The Congress, therefore, will face strong and competing demands for whatever funds are available.

States are also confronting difficult budgetary problems. Although they are starting to report increased revenue as the economic recovery takes hold and spreads, many of them still expect to face deficits and will have to consider tax increases or spending cuts. As a result, state and local officials are likely to be watchful with respect to the amount of funding associated with federal programs relative to the demands those programs make on their own limited resources.

The Federal Priority: Equity or Excellence?

The first basic issue facing the Congress in reauthorizing education programs concerns the equity-versus-excellence trade-off as the focus of federal efforts. In question is the extent to which the Congress wants to continue its current programmatic priorities--notably, meeting the special needs of particular groups of students--or to address the broader issues of educational quality that affect all students.

Focusing on Equity

The federal role in education since the mid-1960s has largely entailed ensuring equal

educational opportunity for students with special needs (see Chapter 1). Federal programs now address the needs of many students who are economically and educationally disadvantaged, who are disabled, who have limited proficiency in English, or who are Native Americans. One argument made by those who want the federal government to continue to concentrate on helping those students is that, although funding for such programs has increased over the past decade or so, the Congress has not provided the support that advocates believe is necessary to meet the needs of these students fully (see Table 1 on page 3). For example, estimates are that Chapter 1 funds serve only about 5 million out of an estimated 8 million or so eligible students. Other advocates call on the federal government to expand its current efforts to help students with special needs by offering additional aid to other students--for example, those in inner cities.

Those observers who contend that the federal government should reduce its emphasis on assisting students with special needs note that sizable numbers of states now provide additional funding to local schools for many of the groups targeted by federal legislation. For example, all states provide special funding for disabled students, three-fifths of them support compensatory education for the disadvantaged, and half of them provide funds for bilingual education. Most states also set aside additional funds for other groups of students--for example, the gifted and talented. These programs could allow the federal government to shift its priorities to other issues.

Focusing on Excellence

During the past decade, the federal government has assumed a prominent role in promoting educational reform that would benefit all students. It has done this largely by focusing national attention on issues of educational quality through commissions, reports, and speeches by secretaries of education and other government officials. Now, with the prospect of making decisions on reauthorization, the federal government has the opportunity to expand its efforts to promote excellence in education in a number of ways.

Advocates of such expansion argue that the performance of the nation's students has not been improving fast enough to meet the challenges of global economic competition. Many of these observers believe that the U.S. standard of living is at risk because the nation's education system may be producing a work force that will be unable to match or exceed the productivity of foreign competitors. Some also argue that the federal government is in the best position to establish and coordinate national policies for improving the quality of education throughout the country, especially in the public schools attended by the vast majority of students.

Critics of proposals to expand federal involvement maintain that the performance of U.S. students has had little or nothing to do with the slowdown in the growth of productivity and income in the nation's economy during the past two decades (a slowdown that other nations have also experienced). These analysts contend that the solutions to problems with the U.S. economy lie primarily in macroeconomic policy and in better decisions by the leaders of U.S. businesses, rather than in upgrading the skills of graduates from the nation's schools. Furthermore, some add, the states have been actively pursuing educational reforms aimed at improving the quality of education--including developing national goals--and additional federal efforts are unnecessary.

How Much Federal Control of Education Should There Be?

The second fundamental issue that the Congress must address in reauthorizing education programs is whether federal control of education should decrease, increase, or remain the

same. The question is a recurring one and must be faced, whether the Congress chooses to continue to emphasize matters of equity or to address concerns about educational excellence in its decisions on reauthorization. Federal control of education manifests itself in at least two distinct ways--through leadership and through program management. In considering whether to change the degree of control exercised by the federal government, the Congress must examine both of these avenues because each has distinct advantages and disadvantages.

Leadership

Federal influence exerted through leadership consists of providing a sense of direction for how the nation's schools should improve. For example, using the bully pulpit focuses public attention on matters of urgent concern. (This strategy, which is open to the Congress, the President, the Secretary of Education, and other high-level government officials, was used by then Secretary of Education Lamar Alexander to generate widespread support for the national education goals.) A second means through which federal influence could be wielded is by producing and disseminating knowledge about effective programs and practices through research and evaluation activities. The federal government's central arm of education research (including education statistics) is the Department of Education's Office of Educational Research and Improvement (OERI), which the 103rd Congress will also consider reauthorizing. In addition, the National Science Foundation and the Department of Health and Human Services sponsor research useful for the schools. A third way to provide leadership is by developing model programs and practices for use by states and school districts. An example of this approach is OERI's sponsorship of so-called world-class standards in seven subject areas (as implicitly called for in the national education goals).

Proponents who believe the federal government should assume a strong leadership role make several arguments. First, they hold that the federal government's central position in the U.S. federal system gives it a comparative advantage in providing a sense of direction relative to the states. There are 50 state governments but only one federal government, and only it can provide a common vision for improvement and coordinate action among the states. Second, because knowledge produced in one state can be used in others, each state will invest less than might be desirable in developing and disseminating information. Some advocates argue that only the federal government is in a position to sponsor and disseminate research on education that could benefit students in all states.

Opponents of enhanced federal leadership in education argue, first, that state leaders are in the best position to know the problems facing their residents. Direction provided by the federal government might only confuse and undermine what they are trying to accomplish. Second, some critics of expanded federal leadership through research, evaluation, and development maintain that such efforts have produced few significant findings to date that have helped the schools. Additional funds spent this way might only be wasted.

Program Management

Federal control of education can also be exerted through the use of program incentives, regulations, requirements, and mandates to achieve federal objectives. Federal programs generally provide funding to state and local authorities in return for their agreeing to provide the services called for in authorizing legislation. In doing so, recipients of federal funds are required to abide by the regulations issued by the Department of Education (or other sources of federal funds), which generally specify how resources are to be used. Most current federal education programs are categorical programs--that is, they address relatively narrowly defined categories of students or problems.

Changing the ways in which program incentives are structured and states are held ac-

countable could increase or decrease federal influence. For example, federal influence might be increased if recipients were required to match federal dollars to some degree. Setting an appropriate matching requirement for federal programs could result in the states spending more than they currently do for students of special federal concern. Alternatively, federal control could be relaxed through broader auditing standards. Tracking federal money to be sure that it has been used properly ensures that federal purposes are served. Requiring less detail and documentation about how funds are used permits state and local recipients more discretion in running federal programs.

The degree of specificity with which federal purposes are defined can also increase or decrease federal control. Mandating how federal resources must be used, for example, is among the most specific of requirements and constitutes one of the strongest forms of federal influence. In contrast, legislation that embodies more general outcomes, with little or no detail about what recipients of federal funds should or must do to achieve those outcomes, is an example of reduced federal control. The first strategy achieves federal purposes by holding recipients of funds strictly accountable for how they use their federally provided resources. The second allows program accountability through the outcomes that are to be achieved.

Those favoring greater federal control through the use of incentives (such as matching requirements), regulations, and mandates make two arguments. First, they contend that current federal priorities have still not been fully accepted by the states and localities that receive federal funds. Without greater control, states and localities may still, for example, use federal funds to supplant, not supplement, the resources that federally targeted students should receive. Second, those advocating greater federal influence maintain that more control could enhance the effectiveness of federal programs. Requiring recipients to match federal funds, for example, could generate considerably more funds and services for federally targeted groups than they now receive. Additional use of selected mandates could be similarly effective in ensuring that students receive the resources they need.

Those who support less use of incentives and mandates by the federal government argue that state governments as well as school districts have changed over the past 25 years. Both are now active supporters of education reform and have made vigorous efforts to address the equity interests of all students. Reduced federal control would allow states and school districts to be more innovative in the use of federal funds, which could be a promising way to promote both equity and excellence.

Second, some advocates of less federal control contend that the federal government is too far removed from the delivery of educational services to determine constructively how educational resources should be used. They hold that education programs are often most effective when those running them develop and adapt resources and services to suit the particular needs of local students. But these decisions, they say, must be made at the state and local--not the federal--levels. The federal government could constructively help by setting the goals to be achieved, but state and local officials should have the discretion to allocate resources to reach those ends. Knowledge of how to improve education, some add, is too imprecise and uncertain to support prescriptive measures.

Among the options to change the role of the federal government in education, many supporters of a less active federal role (with the possible exception of sponsoring and disseminating results from research, evaluation, and demonstration projects) propose the use of block grants.

Chapter Four

Options for Reducing the Federal Role

In the 1950s and 1960s, many observers viewed the states as ineffectual and unresponsive to national concerns about educational equity and excellence. As a result, the Congress intervened and established a range of federal programs in elementary and secondary education. These programs operate with federal funds and under federal laws and regulations, but they are carried out through the efforts of state and local officials.

During the past 25 years, state governments have modernized and become more active. Governors' offices have become stronger, and state legislatures are far more representative of state populations as a whole. As discussed in Chapter 1, states have been especially active in education reform. The governors, together with President Bush, developed national education goals, and in the past 10 years, virtually every state and many localities have initiated education reforms to improve student achievement.

Because the states have become so active in education, the 103rd Congress may wish to consider options to reduce the role of the federal government through means that would vest the states with full programmatic responsibility for schooling through high school and for achieving the goals of educational excellence and equity. These strategies would reconfigure the current system of shared federal, state, and local governance of education, but federal funding could still be provided. The direct programmatic involvement of the federal government in education would be reduced, however, save for supporting research, statistics, and development activities and enforcing civil rights.

Analysts have developed a number of proposals to reduce the current federal role and give the states more responsibility for education. For example, one of the broadest of such strategies would hand over to the states federal programs for elementary and secondary education, as well as programs for training, housing, and other types of investment. The federal government in turn would be vested with full responsibility for strengthening social insurance (including reforming the financing of health care) and increasing national savings.[1] Because this kind of option often involves proposals to adopt new taxes (for example, a national sales tax shared among the states) and because it covers an array of federal programs in addition to those related to education, it is beyond the scope of this study.

Other options are less radical in scope. The two basic strategies discussed in this chapter use a block grant, which would broadly define the purposes that federal funds would serve but not specify in any detail the steps or procedures to be followed. In the first strategy, the federal government would create a block grant to serve students with special needs. In the second, it would provide an expanded general-purpose block grant, along the lines of the Chapter 2 grant, to foster education reform.

1. See Alice M. Rivlin, *Reviving the American Dream* (Washington, D.C.: Brookings Institution, 1992).

Funding for either of these purposes could be allocated on a per-pupil basis or, to help equalize spending for education among the states, on the basis of fiscal capacity--the ability of states to raise revenue. The result of adopting either option would be to reduce significantly the role of the federal government in determining how states and localities achieve federally specified objectives in education, yet at the same time provide some federal funds for them to do so.

Create a Block Grant for Students with Special Needs

The Congress could consolidate most federal education programs, which now generally come with detailed directions and restrictions for use, into one large block grant whose purpose is to serve students with special needs: disadvantaged students, students with limited proficiency in English, Native Americans, and disabled students (although most programs for special education funded by the Individuals with Disabilities Education Act will not expire during the 103rd Congress). Using the 1993 funding levels of the programs, this block grant would total about $10 billion.

Because the Congress could place only broad restrictions on use of the aid by school districts (and assuming roughly the same level of federal funding as is now provided in the categorical programs), the primary advantage of the block grant would be that state and local authorities would have greater discretion in determining the best use of the federal funds. Many people argue that state and local officials, who are closer to the educational problems that need to be addressed and have more intimate knowledge of the special needs of the students to be served, are in a better position to determine which services will be most effective. The implications of that argument for spending are that the same level of funding would probably be more effective or that funding could be cut somewhat without sacrificing educational outcomes.

A disadvantage of the block grant approach, compared with numerous categorical grants, is that current federal priorities for serving students with special needs would not necessarily be maintained. As a result, support for federal funding for education could erode among some groups. The added flexibility of block grants could also mean that federal funds might be spent in ways that benefited students who are not seen as having special needs.

Expand the Block Grant for Educational Improvement

The second option calls for the Congress to fold all current programs for elementary and secondary education--except those for special, vocational, and adult education--into a block grant for education reform. The purpose of the grant, which would be similar to that of the current Chapter 2 program, would be to support state efforts to improve education. If funding were set at the level of current federal spending for these purposes, the grant would total about $9.5 billion.

Because governors have been leaders in education reform, funding for the block grant could be given to state governments. They, in turn, could choose to allocate the funds to school districts or schools on a formula basis or through competition. The states would be responsible for specifying the range of educational improvements they would support with the block grant funds and for identifying how they would hold recipients accountable.

One condition that the Congress might impose on states is that they adopt ambitious goals whose attainment would require significant improvement in their schools. These goals could be either the national education

goals or other goals that states find especially relevant to their unique conditions. A state could support either initiatives that were expected to benefit all students or projects that focused on specific types of students.

Combining most current programs into a large block grant for educational improvement would simplify federal involvement in education and largely focus it on improving education for all students. Supporters of this kind of option maintain that moving to a block grant would reduce the policy incoherence that the current federal system often produces and encourage state and local authorities to take comprehensive steps to improve education. An additional benefit would be the clear definition of education as the mission of states and localities. Current federal programs probably affect schooling only marginally; nevertheless, their existence has allowed state and local officials thus far to escape full responsibility for the academic achievement of all of their students.

Critics of a larger block grant to states to provide support for education reform fear that, over time, federal funds might be substituted for the funds that state and local authorities now provide for education. One consequence of this substitution could be to reduce total spending on education. Another might be to involve the federal government in providing general aid for education--not just aid to improve the quality of education or to address the special needs of students--a responsibility that states and localities have traditionally met.

Allocating Funds for Block Grants

If the Congress chose to support education through a block grant, it could use one or both of two ways to distribute the funding. It could allocate funds on the basis of the number of eligible students residing in a state, or it could allocate funds on the basis of fiscal capacity, which would help to equalize education spending among the states. With the first method, states would receive funding in proportion to the number of their students who met the definition of eligibility, which would be determined by the purpose of the block grant. For example, a block grant for students with special needs might count as eligible those students who qualify for services under current programs. In contrast, a block grant for educational improvement could include all students.

Allocating funds from a block grant according to a state's fiscal capacity, the second method, uses a different mechanism, although it could be used with either of the block grants noted above. A state's fiscal capacity depends on the income and wealth (including property values) of its residents. This factor could be included in the formula used to allocate funds as a component that would increase or decrease the allotment for each eligible student: the lower the fiscal capacity of the state, the greater the allotment for each eligible student, and vice versa.

Each method has pluses and minuses. Allocating funds for block grants on the basis of the number of eligible students would concentrate funding where students reside and, assuming that the data were adequate to determine that number, is fairly straightforward in its mechanics. But the method is not sensitive to variation among the states in the cost of providing education or in the costs of serving different mixes of students with special needs. States that serve relatively more students who are disabled, for example, could face higher costs than those serving relatively more students with other types of special needs.

The primary reason for using fiscal capacity to allocate grant funds is to equalize spending for education among the states. States differ substantially in their fiscal capacity, and significant disparities exist among them in spending for education. (For example, in school year 1989-1990, the highest-spending state spent more than twice the amount of the

lowest-spending state; see Figure 10 on page 35.) Many people believe that such disparities prevent states from providing all students with an equal opportunity for education.

Attempting to compensate for the fiscal capacity of a state, however, may not be the most effective use of federal funds for education. Some of the differences in spending for education among the states may not be the result of real discrepancies in the resources available in the schools. Instead, they may be the result in part of varying preferences for spending on education and varying costs of education among the states. Moreover, studies have shown that the performance of students does not appear to be strongly or systematically related to current differences in spending per pupil for education.[2]

2. See Eric A. Hanushek, "The Impact of Differential Expenditures on School Performance," *Educational Researcher*, vol. 18 (May 1989), pp. 45-51, 62.

Chapter Five

Options for Refining the Current Federal Role

In reauthorizing elementary and secondary education programs, the 103rd Congress could choose to maintain the present federal role in education but refine the federal relationship to specific populations and problems. Under this alternative, promoting educational equity would remain the primary federal objective, and achieving excellence would continue to be the responsibility of state and local governments. The primary federal concern, from this perspective, is the performance gap between students who are the focus of federal programs and others, rather than the overall level of proficiency of all students. Although the academic performance of some federally targeted groups of students has increased relative to that of other students over the past several decades, substantial differences in achievement remain. At the current rates of convergence, it could take decades before all students attain equal levels of achievement.

At present, federal programs do not explicitly aim to eliminate the gap in academic outcomes between targeted students and others; rather, their intention is generally described as promoting equal educational opportunities. They do this by providing compensatory services that help certain categories of students benefit from regular education and by ensuring access to regular education programs. Evidence exists that, at least in the short run, Chapter 1 and other programs authorized through the Elementary and Secondary Education Act can narrow the gaps in performance between groups of students. These programs also serve as a prod and a reminder of the need to continue striving to improve the academic performance of targeted students. Until the performance gap is eliminated, many argue that programs to help special groups benefit from regular education will continue to be needed.

Various proposals have been made for refining the current federal role; some involve spending more money, some less. The proclamation of national education goals by President Bush and the governors suggests that one option is to align federal education programs with the goals, particularly the objectives that concern equitable educational outcomes. A second is to fund existing programs fully. Eliminating programs that are not specifically directed toward special groups is a third option. A fourth is to consider adding a program to address education problems in urban areas. A fifth option would be to improve federal programs by enhancing administrative flexibility. Finally, educational performance might improve if federal programs placed more emphasis on preschool education.

Align ESEA with the National Goals

One possible modification to ESEA would be to align its programs explicitly with the national education goals. The general significance of goals is that they provide teachers

and administrators with a target on which to focus their energies and with a standard to determine whether they are succeeding in improving their schools. Many analysts believe that schools must have such goals if they are to improve. This option would require that the Congress adopt the national education goals initiated by President Bush and the governors in 1989; it would further require that schools receiving federal funds adopt them formally. As noted in Chapter 1, the 102nd Congress considered adopting the goals as part of the Neighborhood Schools Improvement Act, but the legislation did not pass before the Congress adjourned.[1]

Advocates for adopting the goals maintain that they express legitimate national aspirations for improving U.S. schools. Linking their adoption to programs of federal assistance to education would encourage state and local officials to raise standards and improve education across the country. Some people also argue that the goals provide a basis to demand equal educational opportunity for all students by specifying levels of performance that the schools should ensure are being met.

Critics contend, however, that the national goals would not be relevant to many schools in more than a vague way because of the wide diversity across the nation in the quality of schools. Some schools would want to be more ambitious in their aims; others would have accomplished a great deal if they were able to set and reach less ambitious goals. In addition, say these opponents, requiring the adoption of the national goals would divert attention and resources from the reform efforts under way in many states and localities. The national goals would impose uniformity and might inhibit state and local initiative and creativity.

An alternative strategy for coupling ESEA and the national goals is to build on the equity objectives of the goals (see Box 1 on page 10). These objectives specifically call for minority students, many of whom are disadvantaged, to improve their educational attainments relative to other students. For example, an objective specified in goal 2 calls for minority and nonminority students to have the same high school graduation rate by the year 2000. A similar objective under goal 3 stipulates that by that time the patterns of academic performance among minority students will more closely resemble those of the student population as a whole.

Links between federal programs for elementary and secondary education and the equity objectives of the national goals could be forged in several ways. One would be to require school districts that seek funding under ESEA to detail in their applications how their federally funded projects would help achieve the equity objectives of the national goals by the year 2000. A stronger connection could be made by requiring applicants to assess their projects in terms of performance outcomes specified in the objectives. Applicants for federal funds could also be required to stipulate the gains in achievement that they expect from their students to enable them to meet the equity objectives and attain the goals.

Analysts point to both potential gains and losses in this way of aligning the programs in ESEA with the equity objectives of the national goals. An advantage is that it would require recipients of federal funds to think carefully about the purposes of their projects and how to assess their outcomes, and about how their projects relate to the national goals. A disadvantage is that it would add to the complexity of applying for federal funding for these projects and could increase the costs of assessing their outcomes.

Fully Fund Current Programs

Some analysts note that virtually no federal elementary and secondary education program

1 For further information, see Congressional Research Service, *National Education Goals and Federal Policy Issues Action by the 102d Congress*, 92-884 EPW (November 30, 1992)

is fully funded--that is, not one has adequate resources to serve all of the population it was meant to serve or to serve all of it effectively. For example, ESEA's Chapter 1 services go to approximately 5 million students, which some analysts estimate is about 60 percent of those who are eligible. If this estimate is correct, fully funding Chapter 1 would cost about $4 billion more than the $6 billion that is now spent on the program. Other programs are said to be in similar circumstances.

Proponents and opponents of this approach differ in their view of its value. Advocates for full funding of these programs say that it could enhance their effectiveness. Having the programs serve more eligible students could increase the likelihood of improving the academic outcomes of targeted students. But critics argue that full funding might not be a cost-effective way of spending money, especially if those students who are most in need of services already get them. In that case, the additional cost of increasing the level of services might produce much less than proportional gains in student achievement.

Eliminate Programs That Are Not Directed Toward Specific Populations

Another way to refine the federal role in education is to restrict it to supporting students with special needs Although most federal aid is directed toward such students, several of the programs slated for reauthorization have other purposes--for example, the Chapter 2 (school improvement) program, the Eisenhower mathematics and science program, and the drug-free education programs. Eliminating these sources of federal aid could save an estimated $1.5 billion in 1994, which could be used to reduce the federal deficit or support other federal activities. This benefit would have to be weighed, however, against the potential results of reducing support for other concerns cited in the national education goals--namely, improving the quality of education for all students, making U.S. students first in the world in mathematics and science, and ensuring that all schools will be free of drugs.

Create a Program to Improve Education in Urban Areas

The quality of education in urban areas, which has been a long-standing concern of many people, has received renewed attention in the wake of the riots in Los Angeles in the spring of 1992. About 35 percent of the 41 million students who attended public schools in school year 1990-1991 lived in a central city, and a disproportionate share of them are disadvantaged or minority students. For example, minorities constitute about 25 percent of the enrollment in schools in the suburbs but about 60 percent of the enrollment in schools in central cities. Although federal programs are already directed toward many of these students, some analysts believe that because these targeted populations are so concentrated, a special federal program for urban education is necessary.[2]

They note, for example, that such a program could be tailored to meet the unique needs of schools and students in those areas. Because much of the enrollment of many urban schools is made up of targeted students, such a program could encourage schoolwide projects that might be more effective than smaller projects funded by narrowly focused categorical grants in improving the quality of students' education. But other observers are skeptical about whether such a program would be effective and cite the further objection that such proposals ignore other areas that face significant educational problems. School systems in

2. For a review of several possible programs, see Congressional Research Service, *Urban Education Proposals for Reform*, 92-653 EPW (August 12, 1992).

many rural communities, for example, also reportedly have a difficult time providing an adequate education for their students because of problems in generating sufficient funding.

Enhance Administrative Flexibility

Some analysts have suggested that current federal elementary and secondary education programs could be more effective in improving schooling if more flexibility were built into them. Most federal programs are narrowly focused and generally include various requirements that federal funds supplement rather than replace state and local funds for education. Critics complain, however, that such requirements stifle creative uses of the funds that could be more effective than the required actions in accomplishing the objectives of the programs. More administrative flexibility would permit experimentation to improve education for targeted groups--for example, through schoolwide improvement projects. Although other students might also benefit, proper monitoring--possibly including assessments based on outcomes--might ensure that the intended populations remain the primary beneficiaries.

Nevertheless, the potential for misuse of federal funds that might result from more flexibility remains a concern. The nation's early experience with the Chapter 1 program (then Title I), when federal funds were used improperly, is sometimes cited as evidence that current regulations are necessary to ensure that the targeted populations are properly served.[3]

3. The Neighborhood Schools Improvement Act, which was considered but not enacted by the 102nd Congress, included a demonstration program to test the possible efficacy of allowing greater flexibility to promote school improvements. For additional information, see Congressional Research Service, *Conditional Deregulation of Federal Elementary and Secondary Education Programs: The America 2000 Proposal*, 91-531 EPW (July 9, 1991).

Focus on Preschool Education and the Early Grades

A final option calls for the federal government to favor projects that focus on children in preschool programs and in the earliest elementary years--kindergarten through third grade. Some researchers believe that disadvantaged children are most effectively helped when their needs are addressed at the earliest age possible. The major drawback of such programs appears to be that possible benefits for children from early intervention dissipate several years after they enter elementary school. Some advocates believe that additional services are needed for these students to maintain the benefits of preschool after they enter the elementary grades.

The Congress could establish this emphasis on early education in several ways. For example, it could direct school districts to give a higher priority to Chapter 1 projects serving younger children or provide differential funding for such projects. In addition, the Congress could appropriate more funds for Head Start so that all eligible three- to five-year-olds could participate. (Head Start is administered by the Department of Health and Human Services and provides comprehensive health, social, and educational services to poor children and their families.) In 1990, the Congress authorized funding increases for Head Start that were intended to cover all eligible three- and four-year-olds and an estimated 30 percent of eligible five-year-olds by 1994. Under this legislation, budget authority for Head Start is $5.9 billion for 1993 and $7.7 billion for 1994. Head Start's appropriation for 1993, however, is about $3 billion. Adjusted only for inflation, its projected appropriation for 1994 would be similar.

Chapter Six

Options for Enhancing the Federal Role in Restructuring Education

A popular theme in policy discussions about education today is that the United States remains "a nation at risk" of failure and decline in the global economy because of poor academic performance by U.S. students. People who hold this view assert that the nation cannot be revitalized without improving its schools and that the only way to do this is to radically restructure the education system. They want the federal government to use its leverage to bring about revolutionary change--to shift the federal role from one of providing supplementary services to certain categories of students to one of supporting fundamental reform that would benefit all students.

The aim of such restructuring is to create an achievement-oriented system of education that expects a high level of academic performance from all students. The general process involves setting challenging goals for what all children should achieve, establishing curriculum frameworks that embody standards for what schools should teach, and developing a system of assessment to monitor student performance.

Restructuring can be pursued in two ways. The first strategy features school-based reform, a "bottom-up" approach that rests on the premise that real reform can only be accomplished school by school. Public policies to encourage school-based reform emphasize flexibility and use incentives to elicit improvements from principals, teachers, and students at the level of the individual school. The second method of restructuring is systemic reform, a "top-down" approach based on the notion that the existing education system is too loosely coupled. It calls for more state and national efforts to coordinate and align the major units of the system. These include curriculum frameworks (also known as content standards, which specify what knowledge and skills the schools should teach so that all students attain high levels of competency in a subject), instructional materials, assessment systems to measure students' performance, and strategies for the professional development of teachers, principals, and administrators.

Crosscutting Issues in Restructuring Education

In considering whether to promote educational restructuring, the 103rd Congress confronts several issues that cut across both the school-based and systemic reform strategies.[1] For example, should the Congress adopt the national education goals? Should it encourage the development of national curriculum frameworks? Should it support a national system for assessing the levels of achievement of U.S. students? In expressing their opinions on these questions, those who advocate school-

1 The Congressionally authorized National Council on Education Standards and Testing provided a comprehensive analysis of these topics in *Raising Standards for American Education*, which was delivered to the Congress in January 1992 (see Chapter 1 for additional discussion of this report).

based reform generally--but not exclusively--favor an option that offers schools the greatest amount of flexibility. Those who favor systemic reform argue that the schools will always have sufficient discretion to tailor broad national or state policies to local circumstances and that what schools need now is more detailed guidance for improvement. Such conflicting voices form part of the background from which the Congress must consider these questions.

Should the Congress Adopt the National Education Goals?

Many advocates of restructuring argue that schools must have goals if they are to improve. The Congress must decide, however, whether restructuring is best promoted by using the national goals promulgated by President Bush and the governors or by using goals adopted by states and localities.[2] A primary argument for using the national education goals is that they exist and have been widely accepted. In preparing the goals, President Bush and the governors sought a broad base of support and consulted leaders not only in education but in other fields as well. Bipartisan political support was achieved through the efforts of then President George Bush (a Republican) and then Governor (now President) Bill Clinton of Arkansas (a Democrat).

Yet many argue against using the national education goals as a basis to restructure education because they do not reflect the diversity that exists across the country. Many states and localities have already adopted other goals and are vigorously engaged in restructuring their education systems. Requiring them to use the national goals could undercut their ongoing efforts and set back school reform in those areas.

Should the Congress Support National Curriculum Frameworks?

Another basic issue before the Congress is whether it should support further development and then dissemination of curriculum frameworks that embody content standards for various subjects. A variety of professional groups, some with financial support from the Department of Education, have developed or are now preparing curriculum frameworks that embody such standards for mathematics, science, art, geography, history, civics, social studies, English, and foreign languages. Those who advocate the use of these frameworks say that they would provide substance to the call by the national goals for students to show competency in challenging subject matter in various areas. A set of frameworks would specify what all students should learn in specific subjects during their years in elementary and secondary school. Detractors contend that they could lead to a national core curriculum that probably would not reflect the diversity of views and needs across the country with respect to what children should learn in school. Developing a core curriculum might generate considerable conflict among educators, parents, and citizens, and some schools might not adopt it.

Should the Congress Support the Development of National Assessments of Students' Achievement?

The issue of developing a national system to assess the academic performance of students figures prominently in policy debates about education.[3] Two critical dimensions of any such system of assessments are whether they would consist of mandatory or voluntary tests and whether there would be a uniform na-

2 See also Chapter 4, which discusses using the national goals with block grants, and Chapter 5, which deals with requiring schools that receive federal aid to adopt the goals

3. For a comprehensive review of the issues surrounding a national assessment system, see Office of Technology Assessment, *Testing in American Schools* (March 1992).

tional test or state-based tests. Mandatory uniform national tests might be used more frequently for "high-stakes" decisions such as high school graduation, college admission, or job hiring. Voluntary state tests, in contrast, might be used to track changes over time in academic performance in each state.

The nature of the tests used in a national system of assessment have also been a topic of concern. Many champions of national testing favor so-called performance assessments over multiple-choice examinations. In assessments of performance, students must demonstrate competency through challenging tasks--for example, complex projects and hands-on demonstrations (such as portfolios and experiments). Multiple-choice tests, in contrast, are paper-and-pencil tasks that require students to select the correct answer from among the alternatives offered for the preformed questions.

Advocates of performance assessments argue that these examinations would foster the development of higher-order thinking skills and deeper knowledge of subject matter, whereas multiple-choice tests cause schools to emphasize basic skills and memorization of facts. Proponents believe that performance assessments would be "tests" worth teaching to, in contrast to the incentives offered by multiple-choice exams, which are said to narrow the curriculum. Defenders of multiple-choice examinations argue just as strongly that such tests have demonstrated validity and generalizability and are relatively inexpensive to administer. They note that the qualities of performance assessments remain to be demonstrated and that their costs--they typically require substantial time and effort from teachers for each child examined--would be substantially more than the costs for multiple-choice tests, which are often scored by computer.[4]

Although the type of examination and other features of a national system of student assessments would remain to be delineated, the broad issue before the Congress is whether to support the development of such a system.[5] Among the various arguments in its favor, two seem critical. First, some kind of system is needed to increase educational accountability. The results of these tests could be used to track trends in the outcomes of schooling and to identify areas in which students have problems that need to be resolved. Second, such a system would provide an incentive for students to work hard and master challenging subject matter. The tests would register the success--or failure--of students in mastering the materials they should know.

Proposals for such a system have been criticized, however, for several reasons. One major fear is that national tests would lead to a national curriculum. The result of this move could be that the federal government would usurp control of education from states, districts, and schools--stifling their impulse to reform--and centralize education policy at the national level. A second major concern is that poor results on the national tests may reflect not only how the student is doing in school but broader social conditions that disproportionately affect disadvantaged people and minorities. The tests could be used to "blame the victims" of social problems, not improve teaching and learning.

These crosscutting issues present dilemmas that require considerable time and deliberation to resolve. The Congress could, however, choose to promote the restructuring of education without adopting the national goals, without sponsoring national curriculum frameworks, and without supporting a na-

4 For additional information, see General Accounting Office, *Student Testing Current Extent and Expenditures, With Cost Estimates for a National Examination* (January 1993)

5 The 103rd Congress will also be considering the reauthorization of the National Assessment of Educational Progress Some people have recommended that this program, which currently tracks national trends in student performance, be used to spur school improvements. One option would be to incorporate national content standards into the assessment. Another would be to make NAEP a student-level examination that could assess individual performance and be used for high-stakes decisions, such as high school graduation.

tional system to assess students. The Congress could select other options from among the alternatives before it to foster school-based or systemic reform.

School-Based Reform

Proponents of school-based reform build their argument for educational restructuring on several notions. The first is that, because students learn in schools, more effective schools must be created if the performance of students is to be improved. Research has found that effective schools have strong instructional leadership, clear goals, expectations of high levels of achievement for all students, orderly environments, and highly professional teachers. The second notion is that effective schools are fostered when schools have the responsibility and autonomy to improve themselves. Advocates argue that schools meet the needs of their students best and raise their students' academic performance most when they are able to articulate their own goals, fashion their own curricula, and assess their own progress.

Two basic approaches have been developed to promote school-based reform. The first, known as school-based management (SBM), calls for devolving control and decisionmaking from the central offices of school districts directed by local school boards to the people who run individual schools. Under SBM, schools--often led by school councils consisting of teachers, the principal, parents, and citizens--have the authority to set their own goals, adopt appropriate curricula, set discipline policies, allocate budgeted funds, and hire personnel.

The second approach is school choice, which allows parents and students to choose their own schools. Choice can be restricted to schools within a district or within a state and may or may not include private schools. This strategy of improving schools requires the development of different types of schools. Consequently, schools--and especially teachers--must be given the autonomy and authority to develop their own educational visions so that meaningful choices are available.

Both types of school-based reform have found substantial acceptance and support. Examples of school-based management at the elementary school level include James Comer's School Development Program, which features parental involvement and related non-education services; Henry Levin's Accelerated Schools, which uses an approach associated with gifted and talented children to teach disadvantaged students; and Robert Slavin's Success for All program, which emphasizes getting all beginning students off to a good start, especially in reading. At the high school level are the National Education Association's Mastery Learning Schools, the American Federation of Teachers' Charter Schools, and Theodore Sizer's Coalition of Essential Schools.

School-based reform projects have been undertaken in Chicago, Illinois; Cambridge, Massachusetts; New York City; Dade County, Florida; and Kentucky. California, Georgia, and Minnesota have initiated so-called charter school programs, which allow teachers to develop their own schools and receive public funding if they can attract students to them. In addition, by 1992, about 15 states had enacted some kind of school choice program, including interdistrict open enrollment (Arkansas, Colorado, Idaho, Iowa, Massachusetts, Minnesota, Nebraska, Ohio, Utah, and Washington), so-called second chance programs for high school dropouts to choose the school they want to attend (Minnesota), and the option for high school students of enrolling in post-secondary institutions (Colorado, Florida, Minnesota, and Ohio).

The Congress could chose from among a number of options to support restructuring through school-based reforms. Specific policies include block grants to school districts that adopt SBM using a school improvement plan; vouchers for use at a range of schools, possibly including private schools; incentive programs to encourage school innovation; and activities to promote professional develop-

ment. Each of these proposals has advantages and disadvantages.

Use Federal Funds Like Block Grants

A schoolwide improvement plan is a key component of this option, which would encourage schools to develop strategies to improve the education they offer while providing them with the flexibility to achieve the goals they set. Specifically, schools with a schoolwide improvement plan could use the federal funds they receive like a block grant--even though some or all of these funds would be from categorical grants. The federal government, through the school district, would place few restrictions on how the funds were used under this option, provided the schoolwide plans addressed the academic needs of all students. The plans could include goals for gains in achievement or the level of student performance, appropriate curriculum and instructional strategies, and methods for assessing students' progress and accomplishments. The required accountability could be in terms of outcomes. Of course, a major concern about such a strategy is that students targeted by specific federal programs might not receive the additional services that schools now provide because these funds would be used to improve the education of all students.

Provide Federal Aid in the Form of Vouchers

Using vouchers to provide federal aid gives parents and children resources to help pay for the kind of education they prefer and encourages competition among schools to provide effective schooling. Several different types of voucher programs could be tried. For example, funds that are now available through different federal elementary and secondary programs could be shifted to pay for vouchers, which would be distributed to parents and students on the basis of appropriate criteria. Thus, vouchers funded by the Chapter 1 program could be granted based on poverty status and academic need, whereas vouchers paid for from the bilingual education program could be issued based on the language spoken in the home and the student's proficiency in English. An alternative approach would award vouchers to students on the basis of their family's economic status and allow the vouchers to be used in public or private schools. An example of this type of approach is the Bush Administration's proposed "GI Bill for Children."

A number of criticisms have been leveled at voucher systems. Opponents argue that, with vouchers, schools might discriminate in their admissions and foster segregation by race, ethnicity, religion, or socioeconomic status. Moreover, extremists and hate groups could open eligible schools and persuade parents to enroll their children. Another possibility is that the public schools would continue to enroll the students who are the hardest to educate if the voucher was too small to pay for most private schools. Many proponents acknowledge that these concerns are valid. However, they contend that existing choice programs have addressed many of these issues and that a properly designed voucher system could resolve these and other possible problems.

Provide Additional Incentives for Innovation

Placing a higher priority on rewarding schools for innovations that improve the performance of most students, including those targeted by federal programs, could encourage creativity and reform. The federal government--or the states, using federal funds--could set the outcome to be achieved but allow districts and schools flexibility in how they attain it. Incentives for innovation could be provided either in a separate program or as part of existing federal programs.[6]

6. Current programs embodying this approach include the Fund for the Improvement and Reform of Schools and Teaching and the Secretary's Fund for Innovation in Education.

The hope of possible additional funding could encourage many schools to initiate a range of changes, even though not every school would be successful either in its innovation or in winning what undoubtedly would be limited grant funds. Schools that are already effective, however, might be more likely to produce successful innovations than would schools that are currently ineffective. Because funding would not come until after an innovation had been deemed promising, some districts and schools might have only a limited ability to develop new initiatives.

Promote Professional Development

Based on the notion that well-trained teachers, principals, and other administrators are essential to improving the academic performance of students, this option would expand funding for training and education for practicing educators. Training could cover pedagogical as well as substantive issues and administrative techniques--how to teach as well as what to teach, and how to run innovative projects, including school-based management systems. Successful efforts pioneered in other schools and districts could be featured. Professional development programs could be made available both during the school year and during the summer.

The potential cost of such a program requires a careful weighing of its advantages and disadvantages. For example, if such a program were to cost $2,000 for each educator, the funding necessary to train 10 percent of the roughly 2.5 million eligible teachers, principals, and other key staff would amount to about $500 million. An advantage of professional development programs is that they provide a direct way to disseminate new approaches to schooling to teachers and administrators. A disadvantage is that they may not result in changed behavior, especially if teachers and administrators return to schools that are still operated in conventional ways.

Systemic Reform

Another way for the Congress to promote the restructuring of education is through systemic reform. This approach rests on the idea that the academic performance of students is the product of an education system of interconnected people, resources, and ideas extending from the classroom to the federal government. Systemic reform calls for changing the key elements of the education system all at once.

Proponents of this kind of reform argue that the past decade of efforts to improve the nation's schools has had little effect on the typical classroom or on the achievement outcomes of students. Levels of performance remain low in comparison with those of students in other countries--just as they were in the 1960s--threatening this nation's international competitiveness, its standard of living, and its global role. In their view, the basic problem with efforts at reform to date is that they have been fragmented and piecemeal, with potentially contradictory elements. The national education goals were a critical first step in restructuring education, but now the rest of the education system needs to be changed to conform to those goals. Proponents of systemic change contend that attaining the goals may be impossible without such coordinated changes. Only by methodically reconstructing the nation's entire system of education, they argue, can the United States ensure that its children will be adequately educated for the 21st century.

Systemic reform of education starts with a vision--such as that represented by the national education goals--of what an improved education system should do and then proceeds along several lines. The first step involves developing curriculum frameworks with specific content standards for the subject matter being taught. A second would comprise developing new tests to assess the performance of students and forging performance standards to evaluate the results of those tests. A third

avenue could involve preparing standards for assessing the quality of the "opportunity to learn" that a school (or school district) provides its students to enable them to master the materials specified in the content standards. A coherent plan for reform could be constructed by considering all of these dimensions at once.

The Congress has several policy options available for supporting the restructuring of the U.S. education system through systemic reform. For example, it could require the states to prepare plans for systemic reform in their jurisdictions as a condition for receiving federal aid. Furthermore, by integrating health and social services with educational programs, the Congress could address the out-of-school problems that many analysts say impede learning. The use of "value added" assessments is a third potential strategy. Finally, the Congress could consider setting criteria--often called school delivery (or opportunity-to-learn) standards--for judging the capacity of schools to educate their students.

Require States to Prepare Plans for Systemic Reform

Although a number of states are already moving in the direction of preparing plans for systemic reform, the federal government could quicken the pace of change by requiring states to prepare those plans as a condition for receiving federal aid The 102nd Congress considered but did not pass legislation (H.R 4323 and S. 2) that would have required eligible states to develop plans for systemic reform. The legislation did not, however, tie the requirement to federal programs for elementary and secondary education, which would have made such planning a national priority.

Each state plan could be required to include goals at least as ambitious as the national education goals, as well as the following:

- A strategy to develop curriculum guidelines for core subjects that the Congress could specify or leave to the states to determine;
- A design for a state system of assessment, including ways to use tests to hold schools and districts, as well as students, accountable; and
- Methods to foster professional development, including preservice and inservice training.

The Congress could also require that the state plans spell out how they would be implemented and evaluated, perhaps by specifying a budget, a time frame, and strategies for evaluation.

Federal funding to support state plans could be in the form of either a matching or nonmatching categorical grant. There is precedent for using a nonmatching categorical grant in the original Title V of the Elementary and Secondary Education Act of 1965, which helped to develop the capacity of state education agencies to administer federal programs. Matching grants could, however, enhance federal influence and generate additional funding for elementary and secondary education.

Requiring states to prepare plans for carrying out systemic reform could give coherence and direction to efforts toward school reform. A state's plan would focus attention on the education system as a whole and on how the parts function together. It could ensure that reform efforts work harmoniously and that improving the quality of education for all students is a central objective. But a state plan for systemic reform that is a requirement for federal funding could become rigid and prescriptive. By trying to direct education in a top-down fashion, it might stifle the initiative of front-line principals and ignore the knowledge of teachers. As a result, it could limit the ability of those directly involved in teaching to alter strategies in response to changing conditions.

Integrate Social Services with Education

A number of analysts believe that many students do poorly in school because of out-of-school problems in the areas of health, family disputes, attitudes, pregnancy or child care, income support, or protective services. Collaborative efforts involving professionals and services related to these areas may be needed to overcome these obstacles to children's schooling. One possibility would be to provide comprehensive pupil services through the schools.

The basic idea of such a plan is that the school is a strategic place to collaborate in providing the various social services children need because it is a focal point in their lives. An efficient way to take advantage of this quality would be to provide funding for case managers who would coordinate and integrate the needed services on a child-by-child basis. One approach would be to require an Individualized Teaching and Learning Program for students who are judged to be at risk of failing in school. The program could be modeled on the federal requirement for disabled children that an Individualized Education Program be developed in consultation with the child's parents. This program would start when the child goes to school and continue until he or she leaves school Counseling and therapeutic services might be emphasized at younger ages; in later years, the program might provide services to help students find employment and ease the transition from school to work.

The central place of school in the lives of children offers several advantages in trying to mitigate their nonacademic problems. Having schools manage the comprehensive social services needed by children who are at risk of academic failure could ensure that all available resources are brought to bear. Because the schools see these children almost daily, they could monitor their behavior and intervene as soon as problems develop (the approach likely to be most effective in promoting success in school). But having schools take on the responsibility of overseeing comprehensive social services could be costly and administratively burdensome, and it could divert attention away from improving education for all children. For example, if it cost on average about $10,000 to coordinate services in each of the 85,000 schools in the United States, it would cost $850 million to meet that need. This figure could well be higher if additional spending were needed for any other social services provided through the schools.

Require Value-Added Testing

According to the national education goals, U.S. schools should ensure that students learn to use their minds well and become first in the world in mathematics and science by the year 2000. These goals set levels of performance that students are meant to achieve. They do not specify what kind of progress--the value added by schooling every year--the schools must make. But unless students make gains in performance each year commensurate with achieving the levels specified for the year 2000, the goals will not be met.

How can educators and policymakers obtain the information they need to determine whether students are, in fact, making satisfactory progress each year? Levels of achievement are a common measure of students' attainment, but they do not show improvement directly. Only a system of assessments that measures gains in performance--value-added testing--provides such information. Furthermore, only when information is available on how much each student in each classroom has learned annually can teachers and schools know whether or not to take corrective action.

Without scores on gains--how much each student has learned every year--failures can be hidden and successes exaggerated. Effective teachers in schools with many disadvantaged students may not be recognized without yearly measurement of gains in learning because generally low levels of attainment are not uncommon among such students. Simi-

larly, inadequate teachers working with children from families of high socioeconomic status may receive credit for their students' academic performance that they do not deserve.

This option calls for requiring the use of value-added testing, aligned with the national goals, to evaluate the effectiveness of all schools that receive federal aid. Schools could also be required to compare the gains in performance of students of federal interest with those of other students. Value-added testing is already used in some areas, including South Carolina. A variation of it is currently required by the federal government's Chapter 1 program for disadvantaged children.[7]

This option has two advantages. First, it would permit close monitoring of the progress of students toward the national goals. Policy changes could be designed to address specific areas--subjects, classes, and students--in which problems in achieving annual gains are found. Second, requiring the use of value-added testing to evaluate all schools that receive federal funds would reinforce current efforts to develop better tests, including those that assess performance.

This option, however, also has two disadvantages. First, it would be expensive and administratively burdensome to administer this type of test to every student every year. Although a sample of students could be used, value-added testing generally requires testing the same student at least once a year if gain (or loss) scores are to be used for purposes of accountability. Second, an overemphasis on testing could distort what is taught if teachers "teach to a test" that does not adequately cover the material that should be learned.

7 The Title I/Chapter 1 Evaluation and Reporting System (TIERS) used by the Department of Education requires that states and local districts report gains and losses in students' achievement in terms of normal curve equivalents, a statistic developed specifically for Title I to permit national aggregation of achievement patterns

Set School Delivery Standards

Some advocates of systemic reform propose that states be required to develop and adopt standards to assess the capacity of their schools to educate their students in challenging subject matter. These criteria, which have been called school delivery standards, could include the number and quality of teachers in schools, curriculum coverage, instructional materials, and financial support. For example, standards for teaching quality might cover pupil-to-teacher ratios or the scores of teachers on a preservice qualification test. Standards for curriculum coverage could detail what courses a school must teach to ensure that students have an opportunity to learn the materials specified in national content standards. Criteria for instructional materials could address a range of teaching tools from books to computers. Standards for financial support could incorporate criteria of adequacy and equity in school finance within each state or among all the states.

An advantage of school delivery standards is that they would provide a basis for holding schools accountable for the resources they use to educate their students. In this respect, the standards would determine when schools had provided a minimally adequate opportunity to learn. But critics point to the lack of evidence that the resources usually considered for such standards are consistently related to the academic achievement of students. For example, studies have found that measures of class size, facilities, and administrative resources are not systematically related to student performance. Although student achievement is related to good teaching, research to date has not provided criteria for school districts to use to ensure that only good teachers are hired.

Appendix

Federal Programs Whose Authorizations Expire in 1993

This appendix contains a table of federal programs supporting elementary and secondary education whose authorizations expire in 1993. The programs are grouped by legislative category. The table also includes funding levels for 1993. It was drawn from U.S. House of Representatives, *H.R. 5677 Conference Agreement on FY 1993 Appropriations for the Departments of Labor, Health and Human Services, Education, and Related Agencies* (October 1992), and materials received from the Department of Education: a notice in the *Federal Register* of February 4, 1992; the *Annual Evaluation Report, Fiscal Year 1991*; and *Justifications of Appropriations Estimates to the Congress, Fiscal Year 1993.*

Table A-1.
Appropriations for Fiscal Year 1993 for Elementary and Secondary Education Programs Whose Authorizations Expire in 1993

Program	Amount (Millions of dollars)	Percentage Distribution
Total	9,514	100
Elementary and Secondary Education Act of 1965		
Title I		
Chapter 1		
Basic Grants and Concentration Grants	6,126	64
Capital Expenses for Private School Children	40	a
Even Start	89	1
Secondary School Basic Skills and Dropout Prevention	b	b
State Agency Programs		
Migrant Children	303	3
Handicapped Children	126	1
Neglected and Delinquent Children	35	a
State Administration	61	1
State Program Improvement Grants	26	a
Evaluation and Technical Assistance	15	a
Rural Technical Assistance Centers	5	a
Subtotal	6,826	72
Chapter 2		
State and Local Programs	435	5
National Programs		
National Diffusion Network	15	a
Inexpensive Book Distribution	10	a
Arts in Education	7	a
Law-Related Education	6	a
Blue-Ribbon Schools	1	a
Subtotal	474	5
Total	7,300	77
Title II		
Eisenhower Mathematics and Science Programs		
State Grants	246	3
National Programs	16	a
Regional Mathematics and Science Consortiums	14	a
Foreign Languages Assistance	11	a
Total	286	3
Title III		
Magnet Schools Assistance	108	1
Title IV		
Women's Educational Equity	2	a
Javits Gifted and Talented Students Education	10	a
Ellender Fellowships	4	a
Immigrant Education	29	a
General Assistance to the Virgin Islands	2	a
Territorial Teacher Training	2	a
Fund for Innovation in Education	24	a
Civic Education Program	4	a
Total	78	1
Title V: Drug-Free Schools and Communities		
State and Local Programs	499	5
Training of Teachers, Counselors, and School Personnel	14	a
National Programs	62	1
Emergency Grants	25	a
Total	598	6

Table A-1.
Continued

Program	Amount (Millions of dollars)	Percentage Distribution
Title VI		
Dropout Prevention Demonstrations	38	a
Title VII: Bilingual Education		
Bilingual Programs	150	2
Support Services	11	a
Training Grants	36	a
Total	196	2
Public Law 81-874 Impact Aid		
Maintenance and Operations	738	8
Construction	12	a
Total	750	8
Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988		
Fund for the Improvement and Reform of Schools and Teaching	9	a
Education for Native Hawaiians	6	a
Indian Education		
Grants to Local Education Agencies and Indian-Controlled Schools	60	1
Special Programs for Indian Students	12	a
Special Programs for Indian Adults	5	a
Program Administration	3	a
Total	96	1
Adult Education Act		
English Literacy Grants	c	c
Commercial Driver Literacy	c	c
Total	n.a	n.a
McKinney Homeless Assistance Act		
Adult Education for the Homeless	10	a
Education for Homeless Children and Youth	25	a
Total	34	a
Education and Training for a Competitive America Act (Title VI of the Omnibus Trade and Competitiveness Act of 1988)		
Educational Partnerships	4	a
Technology Education	c	c
Total	4	a
Education for Economic Security Act		
Partnerships in Education for Mathematics, Science, and Engineering; Higher Education Partnerships	b	b
Star Schools	23	a
Total	23	a
Education Council Act of 1991		
National Writing Project	3	a
National Education Commission on Time and Learning	c	c
Total	3	a

SOURCE Congressional Budget Office estimates based on information from the Department of Education and *H R. 5677 Conference Agreement*.

NOTES. Numbers may not add to totals because of rounding

n.a = not applicable.

a. Less than 0 5 percent

b. This program has never received funds.

c. This program received funds in fiscal year 1991 or fiscal year 1992, or both, but no funds were appropriated for fiscal year 1993.

Selected Bibliography

This selected bibliography lists some of the key books, reports, and articles that were consulted in preparing this study. Several of the works describe major events in the movement to reform the schools that unfolded over the past decade. However, many of these references focus on analytical issues concerning the federal role in education and the policies that the government might pursue to improve elementary and secondary education. These materials were especially useful in shaping the discussion of alternative federal roles and policies in the last three chapters of this report. Readers who are interested in further information about these matters are encouraged to consult these works as well as the other references cited in the footnotes to the text.

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Questions about these studies should be directed to CBO's Human Resources and Community Development Division at (202) 226-2672. The Office of Intergovernmental Relations is CBO's Congressional liaison office and can be reached at 226-2600. Copies of the studies may be obtained by calling CBO's Publications Office at 226-2809.